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PROFESSOR ANANT SADASHIV ALTEKAR COMMEMORATION VOLUME



THE JOURNAL OF THE NUMISMATIC SOCIETY OF INDIA

Vol. XXII, 1960

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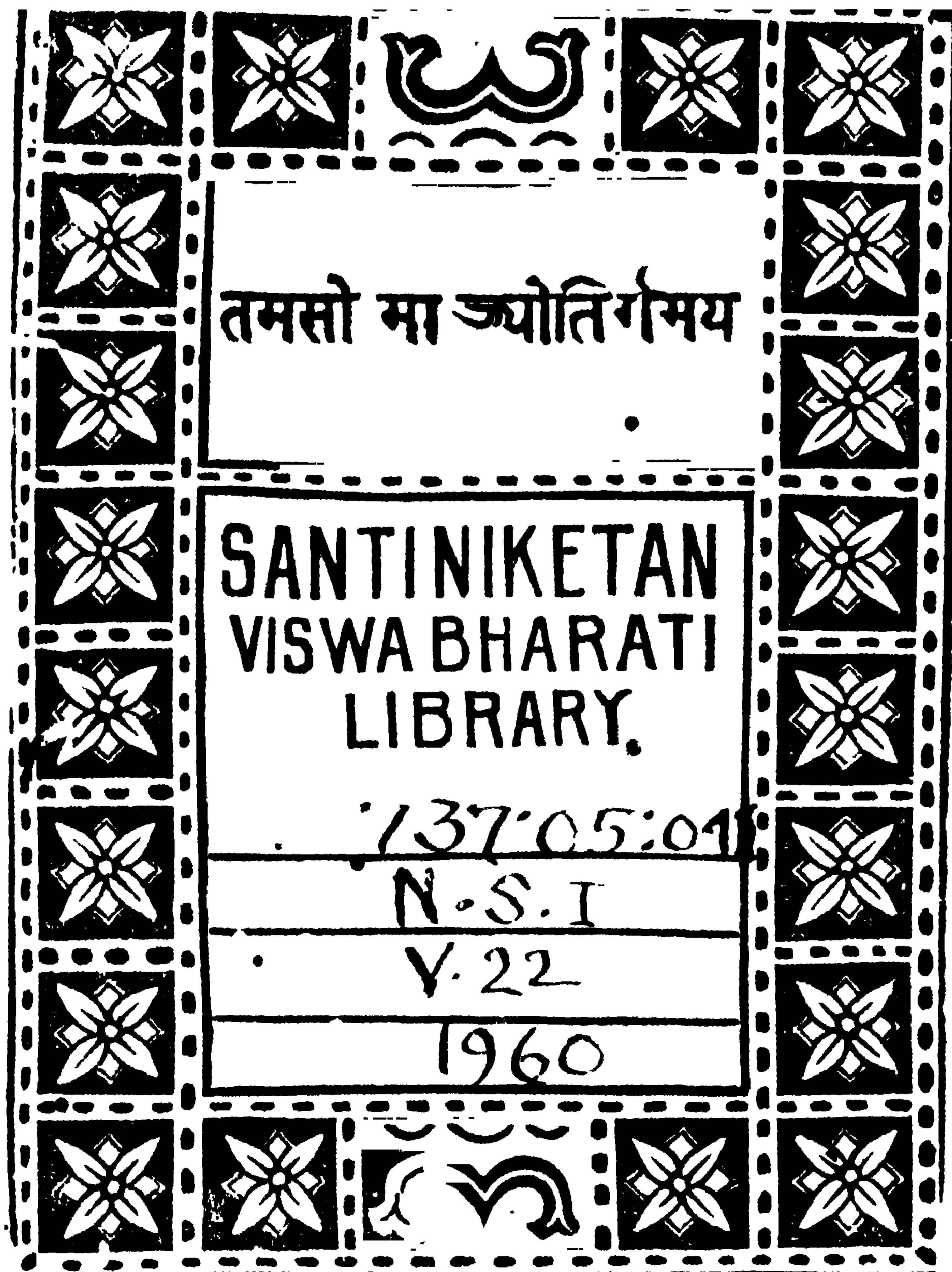
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THE NUMISMATIC SOCIETY OF INDIA

P.O. HINDU UNIVERSITY, VARANASI-5



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JOURNAL OF THE NUMISMATIC SOCIETY OF INDIA

Vol. XXII 1960

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among young Indians. But he was greater as a man. I had occasions to comment on his views. But that never diminished our esteem for each other.

D. C. Sircar

32

Dr. Altekar was great within and great without. He believed in high standards of scholarship and was not prepared to succumb to any influence for backing up any unjust cause. He was, nevertheless, sincere in his convictions and had malice towards none. To repeat the words of the great writer. which he uttered several years back in a different context for Raja Ram Mohan Roy, he was, indeed a luminous star in the firmament' of Numismatics and Ancient Indian History with the vision of a true and ardent scholar, ever running after the achievement of truth.

Dr. Altekar embodies the new spirit, which arises from his ardent faith and conviction in Ancient Indian civilisation, he embodies his freedom of enquiry, thirst for national ideals and its reverent regard for the past. This illustrious figure now rests in Nature's clay, in which he was cast', to use the phrase of Martin 'in Nature's finest mould'. Simple and humble, both in manners and personality, he sleeps freed from the trammels of this groaning world. In his death he has achieved the well-earned rest, which he could not get in his physical existence. Today we are left only to marvel at the remarkable career of a devoted scholars's activity, which branched itself off into different phases for the discovery of truth and its interpretation for reconstructing the past of this country. Let us remember with gratitude the services he rendered unto us, while he rests in peace and eternal bliss 'in the bosom of his father and his God'.

S. P. Srivastava

33

Those who were privileged to know the late Dr. A. S. Altekar, and more so, those who had the good fortune to study under him, will always think of him as one who was not only devoted to the pursuit of learning but also dedicated to the imparting of that learning to those who gathered around him. In fact he seemed to believe that the acquisition of knowledge was incomplete unless it is also communicated to other seekers. In this sense he belongs to the tradition of the great teachers of the country. The first time when I had the honour of meeting Dr. Altekar was in the year 1935. Since then I was chosen to be his Sishya, and was treated as a loved member of his family. Indeed, this was one of the rare qualities of Dr. Altekar, that to him his students were his family-*Saha viryam karavavahai*, as laid down in our Sastras. I gratefully remember the trouble he took in order to get me some accomodation at Banaras, when I wrote to him about it from a distant place in the Mandsaur District where I was then. He personally went to a few vacant houses in the neighbourhood of the University, and wrote to me not only about the rent and locality of the houses, but also the number of rooms in each and even their dimensions, asking me to make my own choice !

As a teacher, Dr. Altekar not only imparted his knowledge to his students but also inspired them to the tireless pursuit of knowledge by their own efforts. It was as if by a spell that he interested a Sanskritist (that I was when I first met him) in the field of history, in which he initiated me. After I had completed my research work under his guidance and got my doctorate from the Banaras Hindu University, I went to bid good-bye to him. After wishing me all luck and giving me his blessings, he quietly added

—I remember those words even to-day!)— ''All my students have acquired knowledge of numismatics and you are the only exception''. This quiet remark had a magical effect on me, and that day I resolved to study the subject intensively.

Scholar, teacher, philosopher and friend, and one who was proud of his Sishya-sampat, Dr. Altekar has left his lasting impression upon all who were privileged to come under his influence. And his memory is revered by his grateful students all over the country.

H. V. Trivedi.



PROFESSOR ANANT SADASHIV ALTEKAR
(BORN 24TH SEPT., 1898 : DIED 25TH NOV., 1960)

Homage

TO THE MEMORY OF

PROFESSOR ANANT SADASHIV ALTEKAR

(IN ALPHABETICAL ORDER OF SURNAMES)

1

I considered myself fortunate enough to have been allowed to go ahead with post-graduate studies in Ancient Indian History & Culture in the year 1945 under the kind aegis of Dr. A. S. Altekar—one of the eminent Indologists of his time. He was a parent to his students, heedless of any consideration of caste and creed.

Very often, I used to be introduced by Dr. R. E. M. Wheeler—the then Director General of Archaeology in India—as 'a student of Dr. Altekar', a fact which enabled me to keep my head high during my training in field-archaeology in 1946.

Dr. Altekar's simple habits and affectionate attitude towards his pupils have remained a constant source of inspiration for their pursuits in various fields of life. I still cherish the valuable advice which he imparted through a letter of congratulations on the eve of my joining service in the Department of Archaeology in the year 1953—'I hope you will remain a student throughout your life.' It has, therefore, been my sincere effort all the while to follow this sacred path, which Gurudeva always showed to his students during his whole life. May his soul rest in peace.

R. C. Agrawala

2

My humble homage to the late Dr. A. S. Altekar. He was a distinguished Indologist whose brilliant

work is known all over, but ancient Indian historical chronology and numismatics he had made his own. As a numismatist, we owe to him much and our debt is too deep for words. He and I were colleagues in the Numismatic Society of India for many years and I have vivid recollection of how he plunged himself into work as soon as the discovery of the Bayana Hoard of Gupta coins, over 2,000 in number, was announced and an invitation came to him from the Maharaja of Bharatpur for completing the academic work on the cataloguing of those coins. Dr. Altekar worked day and night and brought to completion the detailed catalogue of the Bayana Hoard, thus making available to the scholars all over the world scientific facts about each coin in the Hoard.

He soon followed this up by a comprehensive corpus volume of all the known types and varieties of Gupta coins, adding a very lucid Introduction in the work.

As Chairman of the Numismatic Society, over which he presided for many years, Dr. Altekar's contribution is very outstanding. No single man had before him rendered such a meritorious and permanent service to the cause of Numismatic Society. He conceived the idea to a permanent home for the Society and raised money for it by his extreme resourcefulness. The Journal of the Society was raised by him to the high standard, and during all the stages of the fluctuations, he stood by the Journal and the Society as a solid rock. It is our duty to commemorate his services in a suitable way, and to do for the Society what he was striving to do throughout his life.

V. S. Agrawala

3

When I first met Dr. Altekar at Banaras in 1938, I did not believe myself that the gentleman clad

in the simplest possible dress was the learned Professor. Since that year till his last days, it had been my privilege to be closely associated with him. He was an ideal Guru, under whose feet I had the honour to study till 1942. Even after leaving the Banaras Hindu University, I was constantly guided by him in matters both academic and personal. The last letter which I received from him was dated 18-11-59, only seven days before his sad demise. I do not know how to express my deep feelings for the great soul, for whom I can only say-

पुरावेत्ता महात्माऽसौ सुधी भारतभास्करः ।
अस्तं गतः अनन्ताख्यः शिष्यानन्तान् प्रबोधयन् ॥

K. D. Bajpai

4

I had the good fortune to count late Professor Doctor Anant Sadashiv Altekar as one of my most distinguished friends. I do not remember how long ago I became first acquainted with him personally, but it must have been a very long time ago. I used to come to Banaras almost annually for confidential work of the Hindu University, when he was the Manindra Chandra Professor and Head of the Department of Ancient Indian History and Culture there, and he used to insist that I should be his guest during my short stay. I shall never forget the cordial hospitality with which Mrs. Altekar and my distinguished friend received me. I used to meet him more than once a year since he came to Patna as the University Professor and Head of the A. I. H. C. Department there, and then became the Director of the Jayaswal Research Institute. I shall always remember with gratitude the pleasant, profitable and esteemed companionship of my late lamented friend. He was not only a profound scholar, but also in every way a true and perfect gentleman.

The path which Dr. Altekar and myself used to tread in the vast field of Indian archaeology was in many respects common. I might have occasionally faltered in my steps, but he always forged his way ahead, though he was a few years younger than me. His many-sided and first-rate contributions to the study of several branches of Indian archaeology, especially Gupta numismatics, and his researches in a few other branches of Indology earned him well-deserved fame and recognition in the scholarly world of the East and the West.

Dr. Altekar was the heart and soul of the Numismatic Society of India, and in every way the creator, organiser and inspirer of the Institution in its present form. Every member of the Society knows fully well that it would never have developed to its present form had not Professor Altekar been so long in the helm of its affairs. The ungrudging, whole-hearted and selfless devotion with which he guided its activities was mainly instrumental in bringing it to the fore-front of numismatic studies in India.

Dr. Altekar's sudden and untimely death has inflicted a severe and irreparable loss not only to the study of Indology in general, but also to the advancement of numismatic studies in India. The Society has also been left very much the poorer by his sudden demise.

J. N. Banerjea

5

The death of Dr. A. S. Altekar has been a great loss to a large circle of his friends and particularly so to the members of the Numismatic Society of India. He was one of its most active members, and the Editor of the Journal, for a number of years. His knowledge of Ancient Indian History was an asset in his study of numismatics and his articles

and notes in the Journal have been of the greatest interest and assistance to many of us.

I knew him personally and had a great regard for his unassuming manner and courtesy and have also had the privilege of knowing he possessed a keen sense of humour which must have been a great asset to him in carrying out his duties as Editor and having, in that capacity, to bear with the many types covered by the membership of our Society.

C. H. Biddulph

6

My thoughts go back to 1935-36 when I was at Ootacamund as Assistant Superintendent for Epigraphy and made the first acquaintance with the late lamented Prof. Dr. A. S. Altekar. His contributions to the Epigraphia Indica passed through my hands and that occasioned an exchange of letters. Thereafter we often met and discussed problems of our common interest. I was his guest at Banaras and Patna for many a time. Sessions of the All-India Oriental Conference, the Central Advisory Board of Archaeology, as well as several other organizations brought us closer to each other, and every time it was a delightful experience to collaborate with such a pleasant personality as Prof. Altekar. The news of his suddenly passing away was a great shock to me. I miss him all the more because I cannot avail myself of his wise counsel and guidance any longer.

B. Ch. Chhabra

7

I had the privilege of knowing Dr. Altekar for several years. In him there was a rare combination of a scholar and a gentleman.

As Dr. Altekar spent the best part of his active career at Varanasi and later at Patna, his visits

to Maharashtra were infrequent. But, I well remember that whenever he used to be in Poona, I spent many happy hours in discussing some interesting or knotty points of Indian history or numismatics with him and also had a privilege of working with him when he was examining the coin cabinet of Prince of Wales Museum, Bombay. His vast knowledge and never failing courtesy are things which it is impossible to forget. I have no doubt that Dr. Altekar's name will for ever be enshrined in the annals of Oriental Scholarship along with such names as Dr. R. G. Bhandarkar, Pt. Bhagwanlal Indrajee and others, and his spirit will for ever inspire the younger generation of scholars.

P. J. Chinmulgund

8

I knew Dr. Altekar intimately since 1936, first as his favourite student and subsequently as a trusted friend. I found him an ideal Guru, exacting and strict in the matter of studies and discipline, but fatherly in his affection and sympathy. He often chastised and criticised his students, but never stinted consideration to them, and helped the needy.

He combined a rare receptivity of mind with profundity of scholarship. Even at an advanced age he bestowed me the honour of initiating him in the technique of field excavation. It was a sight to see the Guru learning from his shishya field archaeology with a thoroughness and diligence, so characteristic of him.

He was a noble kindly soul and every inch a traditional Indian Guru.

Krishna Deva

9

The scholarly attainments of Dr. A. S. Altekar and the loss to Indology by his sudden death are facts too well-known to be repeated. My long contact with him became all the more intimate when, as the Director of the Kashi Prasad Jayaswal Institute, he took upon himself, albeit with assistance from others, the task of excavation of Pataliputra. The undertaking was noteworthy, for (I may be pardoned for saying so) my experience has been that historians do not generally take kindly to archaeology, the understandable reason being that the fields of work of the historian and the archaeologist are different from each other : while historical research involves study in the library and archives, archaeology primarily means work in the field. This notwithstanding, Dr. Altekar, at an age when people are said to lose adaptability, set himself to his new task with remarkable eminence. For his excavations at Pataliputra he acquainted himself with the technical problems of the early historical archaeology of India. And his discovery of a very early stupa at Vaishali, believed by him to be the one erected by the Lichchhavis over the relics of Buddha himself, was the result of a remarkable combination of literary evidence and archaeological data. The historian-archaeologist wielded his pen and spade with equal facility.

A. Ghosh

10

Dr. Altekar was my Guru, in the real sense, though I had no occasion to attend his classes even for a day. He nourished my accidently aroused interest in numismatics, with great patience, care and affection. It was more than twenty years ago, when just having heard his name, I had written to him some silly questions regarding numismatics and had

sought informations from him. He had then very promptly replied to my letter and given in detail all the information that I required. From that day, he had been constantly replying to my letters and encouraging me and giving his guidance and advice. Soon I won his paternal affections and he reposed so much confidence in me that when he had to select one among his pupils to work with him as an assistant in the study of the Bayana hoard, he preferred me, a non-matric, over a number of others, who were much more equipped than me. Now, if I have any place in the field of Indian numismatics, I owe it to him. I am unable to express my feelings in words. I can only say that in him, I have lost much more than any one else.

Parmeshwari Lal Gupta

11

प्राच्य विद्या के मूर्धन्य मनीषियों में स्वर्गीय डाक्टर अनंत सदाशिव अल्तेकर का अन्यतम स्थान है। उन्होंने भारतीय वाङ्मय के अगाध सागर में तल्लीन होकर बहुमूल्य विचार-रत्नों की गवेषणा की और प्राचीन भारतीय इतिहास तथा संस्कृति के विभिन्न अंगों को व्यवस्था दी। उनका समूचा जीवन शोध कार्यों के लिये समर्पित रहा।

पूज्य डाक्टर साहब के अध्यापन और परामर्श विद्यार्थियों में शोध की प्रवृत्ति जगाते रहते थे, शोधकर्ताओं को उनसे बौद्धिक सहयोग प्राप्त होता था और उनके सान्निध्य में आने वाले जिज्ञासुजनों का उत्साह उत्तरोत्तर बढ़ता जाता था। यह उनकी अपनी विशेषता थी।

यह मेरा सौभाग्य था कि मुझे उनके शिष्य होने का अवसर मिला। अपनी सरलता, सादगी, शिष्यों के प्रति स्नेह और ज्ञानगरिमा से वे सच्चे अर्थ में गुरु थे। वे अपने विद्यार्थियों के दैनिक जीवन के सुख-दुख का ध्यान रखते थे और हर प्रकार से उनकी मदद करते थे।

उस महान् आत्मा के प्रति मेरी श्रद्धांजलि अर्पित है।

बालचन्द्र जैन

12

I consider my association with Dr. Altekar as one of the privileges of my academic life. He carried his scholarship lightly on his shoulders and combined with his deep learning humility all too rare. During his sojourns in Bombay he would visit me at my office, a very graceful gesture towards a junior and I became all the richer by my talks with him on some new coins he may have discovered giving information on a king or prince hitherto unknown or a dynasty so far obscure. But our talk sometimes drifted into other spheres and I remember one occasion when he talked to me about certain difficulties and troubles he had to face. His attitude was cool, calm, collected. Indeed, he was a स्थितप्रज्ञ, a highly evolved soul.

P. M. Joshi

13

I was in close contact with Dr. Altekar for nearly ten years. His profound scholarship, his great but unassuming personality and his affectionate behaviour always drew me near him.

Dr. Altekar was an international figure in the field of Indological studies. He was impersonal in his academic pursuits and was a true seeker of truth. He was never dogmatic and impatient with scholars who held opposite views. He would neither be jubilant in pointing out other's mistakes, nor would he hesitate to admit an error that escaped his notice. I would always respect the memory of Dr. Altekar specially for this trait of his character.

A. N. Lahiri

14

The death of Dr. Anant Sadashiv Altekar has removed a great figure from the field of Indology.

An erudite scholar and an untiring writer, he devoted himself, heart and soul, to the study of ancient Indian history, and his outstanding contributions in various branches of Indian history and numismatics over a period of more than thirty years have secured him a high place in the top rank of Indologists.

But apart from his ripe and mature scholarship, his memory will always remain dear to me as a loyal colleague and sincere friend for a quarter of a century. I have worked with him on many schemes of literary work and academic organizations, and have always been struck with his sincere zeal and enthusiasm for work, unassuming simplicity of life, and hard ungrudging industry.

In him I have lost a genuine personal friend whose loving memory will be cherished in my heart till the last day of my life. May his soul rest in peace !

R. C. Majumdar

15

I was happy to enjoy the friendship of Dr. Altekar for more than forty years. He joined the Deccan College, Poona, while I was Fellow at the College. So I had opportunities to observe how his intelligence sprouted forth in his early age. Even in his college days he was distinguished for his learning. Later he won a name for himself by his essay on the History of Important Towns and Cities in Gujarat and Kathiawad and his History of the Village Communities in Western India. His wide reading and thorough knowledge of Sanskrit gave the stamp of authoritativeness to all his writings. His contribution to numismatics cannot be too highly praised. It was mainly by his efforts that the Numismatic Society has attained its present prestige.

Dr. Altekar was a standing example of plain living and high thinking. He was a thorough gentleman and never hurt any one by word or deed. He was therefore really **Ajātaśatru**. He could hold his own with great pertinacity, but was ever ready to admit his mistake when he saw that he was in the wrong. Steadfast adherence to truth was the motto of his life. He was absolutely free from malice and always encouraged young men in research. As Max Muller said of Buhler, 'he was in fact one of the few scholars with whom it was a real pleasure to differ because he was always straightforward, and because there was nothing astute, mean or selfish in him, whether he defended the **purvapaksha**, the **uttārapaksha** or the **siddhanta**.'

Dr. Altekar's numerous contributions to Indological research will always keep his memory green. By his death India has lost a great historian, epigraphist and numismatist.

V. V. Mirashi

16

My friendship with Dr. Altekar was of a fairly long duration. When I joined First Year Arts in the Hindu University in 1925, Dr. Altekar had just joined the service of the Hindu University. I joined as a student with Ancient Indian History and Culture under him. But owing to circumstances beyond my control, I was forced to get myself transferred to the General History course inspite of the persuasions of Dr. Altekar. After I had left the Hindu University in 1931 to join the University of London, I lost touch with Dr. Altekar for a few years, but as soon as I returned from London, I met him and I found that his love for me had not been diminished in any way. When I went to deliver a series of lectures on the problems of trade routes and caravans in ancient India to Patna in 1952, I

stayed with Dr. Altekar and I will never forget his courtesies as a host.

I had the good fortune of working with him on various advisory boards appointed by the Government of India and I was always struck by his unassuming nature but a strong will to get things done.

During the course of my life I have known many great men and teachers but, I am afraid, nobody has impressed me so much as Dr. Altekar. May his sterling character give us courage to carry out the work which he has left unfinished.

Moti Chandra

17

Dr. Altekar was more than a teacher for me. In many respects, he was my guardian. Right from my under-graduate studies, he guided and inspired me. He encouraged me by reposing his confidence in me. He taught me to be bold, open and fearless in my investigations. When he found me wavering he would chide me, when he found me over-confident he would caution me. He told me not to worry about criticisms for in fact they help one to improve. He was sometimes ruthlessly blunt in discouraging me but it was always in my interest. He often told me about the Marathi proverb that a stone can become an image by being constantly chiselled. I am full of memories of Prof. Altekar as a man. I have met and come in intimate contact with many scholars in my field but few can excel him in human qualities. He was a great scholar but he was a greater man.

A. K. Narain

18

I have a deep sense of gratitude and regard in offering my humble homage to the late Dr. A. S. Altekar of revered memory. I was closely associated

with him in both my personal and official capacities. I was one of the earliest students taught by him at the Banaras Hindu University and I had all along his affection and solicitude since then till his last days. Only four days before his unfortunate death he stayed with me in the university and we went together to the Executive Engineer of the university to discuss the plan of the proposed building of the Numismatic Society of India. He was my teacher in the under-graduate and the post-graduate classes and my guide while I worked for the D. Litt. degree of the Banaras Hindu University. I was his colleague in the university for about thirteen years.

The impression that Dr. Altekar has left upon his generations of students, colleagues, admirers and learned public at large is inspiring and abiding. He was genuinely devoted to the goddess of learning, extremely simple and unassuming in habits and always ready to help his students in the acquirement of knowledge and their promotion in life. Beneath his rugged exteriors he had the kindest of heart full of the milk of human goodness.

As a scholar of Indology he had very few his equals both in its extent and significance. There is hardly any field of Indology, which he did not touch and adorn. His contributions in the fields of dynastic history, polity, society, law, epigraphy and numismatics are wide and of permanent value. As regards Indian numismatics, he was one of its chief architects. He fathered and mothered both the Numismatic Society of India and its Journal since their very inception. He will live in the memory of future generations of scholars as a monument of learning to inspire and guide their path.

Raj Bali Pandey

19

I did not have the pleasure of meeting Dr. Altekar very often. Though I met him for a short while, he

left a deep impression on me. Although pressed for time, he kindly accepted my invitation to have a look at my collection of coins. The interest that he took in looking at each coin created a deep interest in me in numismatics. His interest in numismatics was infectious.

H. P. Poddar

20

Dr. A. S. Altekar, M. A., LL. B., D. Litt., is well known as a profound scholar, a sincere and experienced worker in the field of numismatics. He will always be remembered for generations to come.

I had the pleasure and privilege of working with him.

Prayag Dayal

21

I saw Dr. Altekar for the first time at Tirupati at the session of the All-India Oriental Conference in 1940, and for the last time on the platform of the Bhuvaneshwar Station on our way back after the conclusion of the session of the All-India Oriental Conference in October 1959. During these twenty years, I used to meet him at the sessions of the Indian History Congress and the Oriental Conference and also at Bombay. Though I had not the privilege of being his regular correspondent, I had occasion to write to him in several capacities.

There were enquiries about some research problems requesting for elucidation, clarification, bibliography, and the like. As the Assistant Editor of the History and Culture of the Indian People, I wrote to him several letters in connection with taking up some chapters, or about my doubts and

difficulties regarding some points in the various chapters of the History, and finally regarding the chapter he contributed to Vol. IV. I also used to request him to write articles for the Bharatiya Vidya, of which I was the Editor, and he obliged by sending some contributions. Dr. Altekar was mostly prompt in his replies, which were always to the point, and was ever helpful and encouraging to junior scholars. He was associated with me as a colleague at the M. A. Examination of the University of Bombay for several years, and I had vivid memories of our meetings which were lively and interesting on account of his presence.

Dr. Altekar gave his frank opinion without caring for the favour or frown of the person concerned or involved. Though he was accommodating in spirit, he was firm in his views once he found them to be based on solid grounds. When approached for direction and guidance, he gave proper advice in personal matters also. On all occasions when I met him in Bombay with the files of our History volumes and sought his directions with regard to the procedure to be followed, my difficulties about some chapters, or some knotty points, his mastery of the subject enabled him to give prompt advice, which was always correct and precise, and, needless to add, which I always followed.

Dr. Altekar's sudden and premature death has, no doubt, created void in the realm of indological studies which is difficult to be filled.

A. D. Pusalker

22

My association with late Dr. Altekar was of short duration but full of memories. I first met him in October 1958, when he had come to Hyderabad for the Archaeological Advisory Board meeting. He was

pleased to see my coin collection and some papers on new coins written by me. Since then, he took keen interest in me. I received his masterly guidance and constant encouragement. I owe my humble little efforts wholly to him. His sudden demise was a great shock and loss to me.

As a scholar, his strenuous efforts, sound knowledge and precious contribution to ancient history and specially to numismatics are well known. His simplicity, pleasing behaviour, kind and complaisant nature will ever remain fresh in our memories. As his humble student, I pay my homage to him, with deep devotion and heart-felt gratitude.

Dinkar Rao

23

I made my first acquaintance of Dr. Altekar in a heated discussion on "The relations between the Kakatiyas and the Yadavas". We differed in our view points and this difference drew us together. He showed keen interest in my further researches in the history of the Kakatiyas and the Satavahanas and goaded me again and again to search for the coins of the Satavahanas in order to obtain fresh light on their history. It was at his suggestion that I examined large numbers of Maharathi, Kura and Satavahana coins in the Bombay, Madras and Hyderabad Museums and published descriptive Catalogues of select coins from these collections. We discussed the significance of these coins on several occasions and shared identical views. "List of Published Satavahana Coins" was prepared also at his suggestion.

Dr. Altekar and I were closely associated with the Indian History Congress and acted in unison on many occasions. His equanimity and patience were not a little responsible for helping the Congress to tide over the crisis that faced it at Jeypore

and his considered advice was of great help in meeting a similar situation at Vallabh-Vidyanagar. He was a tower of strength, as is well known, to the Numismatic Society of India and the valuable work that the Society has done during the last one decade was inspired and guided by him.

It was a pleasure to discuss problems with Dr. Altekar and his wide and deep knowledge was always helpful. His love of work was infectious and he had his unique way of setting people to work. I always revered him as a great scholar, loved him as a senior colleague and admired him as a fine man.

M. Rama Rao

24

The posterity will undoubtedly remember Dr. Altekar as an eminent Indologist. But to some of us, he was more a 'man', a human being with infinite affection for others, an extremely lovable soul with simplicity as hall mark of life and a person with a keen sense of humour.

About the first two qualities, his students and friends are already aware. I shall recall an incident to illustrate the last aspect.

Sri C. D. Deshmukh, the then Finance Minister, Government of India, was visiting Nalanda. Professor Altekar was accompanying him. They came in front of an image of Jambhala. Dr. Altekar, after reiterating its iconographic aspects and relation with Kubera, remarked in a jocular way, addressing the Minister, "Sir, it seems to be your counterpart." Sri Deshmukh smiled and then retorted, "But Professor, I am something more than your Kubera. He is merely a custodian of wealth. But I can create wealth to any extent I like", and then with a pause, "by printing any amount of paper, I desire to do." With a mock-graveness

on his face, the Professor submitted himself to the Minister acknowledging his immense might, in a manner that could not but evoke laughter from persons present on the occasion.

With the departure of Professor Altekar, there will be lesser sunshine in the scholarly world of India.

S. C. Ray

25

I met Dr. Altekar last time at Bhuvaneshwar in 1959. At that time we discussed our proposed scheme of exploration in Bihar. Just a week or so before his sudden death, he wrote to me that his doctor had advised him not to wander about as a young man of 25. These last few words are extremely significant as they give an index to the character of Dr. Altekar. Though he was brought up in the so-called 'historical archaeology', and had particularly specialized in epigraphy and ancient Indian history, even at a very late stage in his life, he had evinced keen interest in field archaeology and carried out a number of excavations of outstanding merit in Bihar. As if these were not sufficient, he thought of carrying on prehistoric explorations with a view to knowing the prehistory of Bihar. This usually required a lot of wandering from place to place and even this he was prepared to undertake, though he was comparatively advanced in years. Indian archaeology would certainly profit a great deal, if it had many more scholars of Dr. Altekar's calibre and enthusiasm.

H. D. Sankalia

26

I met Dr. Altekar first in Bombay in 1949 in the session of the All-India Oriental Conference

when I showed him some inscribed seals from Rajghat which I had purchased from the late Shri Bhola Nath of Mathura. I found in him a very sympathetic scholar who was always eager to help others working in the field of Indology. Then we went to the Elephanta caves. He picked up a long twig and used it as a stick. On the way, I told him about the references to coins which I had found from the (then) unpublished Jaina work Angavijja. I also told him that the work gave us for the first time the name 'Khattapaka' for Kshatrapa coins. He was so pleased that he encouraged me to write a paper on the same for the Journal of the Numismatic Society of India. He also directed me to go through some articles about early Indian coins. It may be said that he was the very heart and soul of the Numismatic Society of India. We met again in Ahmedabad, Annamalai and Delhi. He published my paper on Numismatic Data from Early Jaina Literature. In fact my interest in numismatics was roused and developed because of the inspiration and guidance he gave to me since our first meeting in Bombay.

We also carried on correspondence and I had an opportunity of discussing with him our interpretations of the passages of the Devi-chandraguptam.

May his soul rest in peace.

Umakant P. Shah

27

It was in 1937 that I sent one of my research papers to the late Dr. A.S. Altekar. His comments on it were not only appreciative; they also indicated the lines on which further thinking could be done. Whether one wrote on sanskrit literature, history, epigraphy, numismatics, philosophy or Fine Arts, Dr. Altekar had always some constructive suggestions to offer; and I personally profited much as a result of my contact with him, maintained

mostly, of course, through correspondence. His passing away has been one of the most grievous losses to oriental scholarship, for only great acharyas like Dr. Altekar have the faculty and capacity to visualise the Truth in its entirety.

Dasharatha Sharma

28

Dr. Anant Sadashiv Altekar whose untimely death has given a serious shock to us all was a man of loving and pleasing nature. He was a man in the real sense. In the capacity of Assistant Secretary and of Treasurer of the Numismatic Society of India, I had the good fortune of being in close contact with him for a number of years. I know how ably the Journal was edited under his Chief-editorship and how gradually he enhanced the status of the Society by collecting funds from various sources. I can say from my personal experience that he was not only a great historian and numismatist but an able administrator too. He acted as an important member on the Advisory Board of Archaeology of the Government of India where he wielded considerable influence. He was also Advisor to various museums and cultural institutions of our country and his expert advice had always proved useful to them. He wrote a number of valuable books on the history and coinage of India and his last two volumes on the coinage of the Gupta emperors will always remain as monumental works to his credit. He was invited by the Yale University of U. S. A. to deliver lectures on his favourite subjects and this task was so ably discharged by him in a short time. In his death, we have lost a loving friend and an able administrator and the vacuum thus caused can hardly be filled. With these few words, I humbly and respectfully pay my homage to our departed Leader.

C. R. Singhal

29

I have known Dr. Altekar for well-nigh twenty years as one of our revered colleagues in the Indian History Congress, and more so as one of our learned co-editor in the now abandoned scheme of writing of a new History of Indian People under the auspices of the Bharatiya Itihas Parishad, which was merged in the scheme of the Indian History Congress. I was always greatly struck by his singleness of purpose and the unstinted devotion to work and study of whatever subject he took up during his long period of research and historical studies. I do very much wish and hope that the ideal set by him will be persistently followed by the coming generations of scholars and historians with the same singleness of purpose and unstinted devotion.

Raghubir Singh

30

I deem it a great privilege and my singular fortune to have come into intimate contact with Dr. A.S. Altekar since early 1950. I knew him from before as a great indologist and he came to Patna with his reputation travelling much ahead of him. I soon joined the newly started department of Ancient Indian History and Culture of which he was invited to be the Head. I found Dr. Altekar an expert on all important branches of ancient Indian history. He was not only a numismatist of international fame but was an epigraphist, an expert on social history and institutions and an authority on ancient Indian polity. His contribution to political history will be remembered especially because of his Rashtrakutas and Their Times and his reconstruction of the history of Ramagupta. Dr. Altekar had the great advantage of being a good sanskritist. Even in his advanced age when he came to Patna he had the vigour of youth and the

curiosity of the young to apply himself to an altogether new subject. Archaeology became his new passion in his last years, and Kumrahar and Vaishali were brought back to life from long neglect and Sonepur arose as a new star in the Indian archaeological firmament. Dr. Altekar not only set the department of Ancient Indian History and Culture of the Patna University on sound foundations but even when he was formally not responsible for it he continued to guide the affairs of the Department with love and devotion, and significantly helped in its later development. In Bihar his personality and his lectures created an atmosphere of renaissance for research in ancient Indian history and a Comprehensive history of Bihar was planned under his chairmanship.

It would be an impossible task to catalogue his achievements and to fathom our debt to him. As a teacher he was affectionate and commanded respect, but as a superior officer, he won unstinted loyalty and cooperation of the colleagues by his pleasant manners, and generous attitude.

He was great as a scholar but greater as man, and, as a leader of a band of scholars devoted to the same mistress - Indology, he had no peer.

May his soul rest in peace.

B. P. Sinha

31

Professor A. S. Altekar was one of my examiners in the M. A. examination and I always paid him the respects due to one's teacher. Whenever I had occasion to visit Banaras in connection with examination work of the Hindu University, I was his guest. He was a nice hospitable gentleman and a scholar of dynamic personality. As an Indologist, his greatest contribution is the interest in numismatic studies, which he suceeded in creating

PROFESSOR ANANT SADASHIV ALTEKAR

A. K. NARAIN

It was perhaps the last day in the month of November in London, that hardly had I put off my overcoat in the hall of the School of Oriental & African Studies and was getting ready to go to the Reading Room with my notes, when my friend Professor Ram Sharan Sharma told me with a grim voice 'Dr. Altekar is dead' and gave the letter to me which he had just then received from a friend in Patna. I did not believe it ; how could I ? I had posted a letter to him about a week before giving him an account of my useful trip in the Continent. And was it not that I had received his letter only few days before, anxiously enquiring about my welfare, how I fared in Europe and what new material I had gathered in the museums of Europe, and telling me the various problems of the Numismatic Society of India and the latest worry about the Corpus series and the Golden Jubilee and the correspondence he was having with the Government for these things– it was all so fresh and I was in fact expecting his reply that day to my last letter which I was later told was lying on his table to be dealt with late in the night or early morning on what was to be the last day of his life. Yes, Professor Sharma did tell me that he died almost working to the last on the table– he was in fact giving final touches to his Presidential Address for the Gauhati History Congress. But I had no courage, no inclination and no faith left to read the letter. How could it happen ! But it did. Death has indeed no discrimination. Sharma and I sat sullen in that distant land deprived of paying our last *praṇāma* to that simple, sincere and great man who impressed every one who had the pleasure and privilege of knowing him. We sat for an hour on the bench and yet another hour passed and in fact the whole day passed, sometimes sitting on the bench, sometimes strolling in the hall, struggling hard to reconcile to what had happened—whether it should have happened to him at all ! Next day, and then a week passed, and whenever I would open the books in the Reading Room, Dr. Altekar would seem to me present before my eyes It was difficult to work but then it was his desire to find his student working hard, and harder than him, and I would reconcile myself again to the problems of Kanishka which I was doing then or to Corpus of the Indo-Greek coins to which I was giving finishing touches. Dr. Altekar's death was a shock hard to recover from ; but it was also an irony of human life. On behalf of some of his students and friends I had approached Dr. Altekar for a permission to bring out

a felicitation volume when he would complete 60, to which he had answered most disinterestedly and, when I wrote to him again and insisted in this connection, he replied in a letter, which is still with me, "I think that you should plan for your felicitation number when I complete my 70 years. Just now we are approaching people for donations for the building; the same set of people will have to be approached for donations for the felicitation volume. (Publishers) always complain that Commemorative volumes do not sell......" This was only four months before he expired; I wish I had disobeyed him. Any way, I wrote to Dr. R. B. Pandey, the Chairman of the NSI, and Mr. P. L. Gupta to move for bringing out an issue of our Society's Journal as a memorial volume to Dr. Altekar; this was the least we could do.

Early Life

Anant Sadashiv Altekar was born on the 24th September 1898 in a distinguished family of Deshastha Brahmans in the village Kagal in Kolhapur. Since he was born on *Anant Chaturdashi* he was named Anant. He was the second child of his father Sadashiv Khandoba Altekar, an active member of the local Bar, a *litérateur* in his own right and one of the most esteemed and selfless workers of his time. The family, which took active part in the National movement, had to move to Karhad to avoid being harassed by the Kolhapur state.

In 1915, Anant passed his Matriculation examination and was admitted to the Deccan College, Poona. He obtained a 1st class in the Intermediate Arts examination as well as in the B. A. examination. He won Bhau Daji Prize and Sir Lawrence Jenkins Scholarship. He chose to specialise in Sanskrit and took the M. A. degree in this subject and won the coveted Chancellor's medal of the Bombay University in 1922. As Father R. Zimmerman, a well known Vedic scholar and an exacting examiner, observed later: 'From the work submitted to me, it was clear that the candidate was endowed with exceptional talents and possessed an erudition beyond his age. Questions on both Vedic and classical literature were mastered with the same perfection. The epigraphical paper, he wrote, would do credit to an archæologist of high rank.' Since it was incumbent for the recepient of the Jenkins Scholarship to take up law, he also joined the LL. B. course and took the degree in law.

Joins Banaras Hindu University

After passing the M. A. examination, Anant Sadashiv applied for a Government post and was called for interview

at Simla. When he met his father on returning home, he was wearing an English suit. His father, who was a staunch nationalist, was not very happy over this. The son, who had already imbibed his father's ideals of service to the motherland immediately changed his mind and threw all his foreign dress and took to wearing Khadi, and refused the Government post when the appointment letter reached him. That was a great turn in his life. Anant Sadashiv returned to studies and he decided to take up a job which would allow him the scope of service to the motherland as well as keep his intellectual ambitions awake. In 1923, he joined the Banaras Hindu University which was already established as a centre of learning and which patronised scholars of nationalist ideals and those imbued with the spirit of service and sacrifice. On the one hand Altekar could draw intellectual inspiration from eminent scholars like A. B. Dhruva and R. D. Banerji and on the other he could feed his nationalistic sentiment under the benign and patriotic personality of Mahamana Madan Mohan Malaviya. In fact, here at Banaras, Altekar could ideally combine his intellectual pursuits with service to the nation. In 1928 he was admitted to the degree of D. Litt. of the Banaras Hindu University on his work, *The History of the Rashtrakutas*. He worked under Professor R. D. Banerji, and F. W. Thomas and V. S. Sukthankar, the examiners of his thesis described it as "a solid and well documented piece of work". D. R. Bhandarkar was very much impressed by his "invariably sober and thoughtful conclusions". It was in 1928 also that he wrote his first article on Ramagupta, the credit of whose discovery goes to him. In the same year, Anant Sadashiv Altekar was promoted to the post of the Professor of Ancient Indian History and Culture and in 1930 he succeeded R. D. Banerji in the Manindra Chandra Nandi chair. He served the Banaras Hindu University for over twenty-five years with devotion and a spirit of sacrifice. When he joined Banaras, his basic discipline was in Sanskrit and epigraphy, a great advantage for any worker in the field of ancient Indian history and culture. Equipped with this basic discipline, Altekar could pick any subject for his research studies and a perusal of his work while he was at Banaras gives an ample idea of his contributions in the various branches of political and cultural history. Among his major publications during this period are ***Education in Ancient India***—1934, ***Rashtrakutas and Their Times***—1934, ***Position of Women in Hindu Civilization***—1938, *Vakataka-Gupta Age* (A New History of the Indian People, Vol. VI, jointly with Dr. R.C. Majumdar)—1946, ***State and Government in Ancient India***, Hindi edition—

1947. Among other notable contributions during this period are *Sources of Hindu Dharma*—1932, *A History of Important Ancient Towns and Cities in Gujarat and Kathiawad*—1936, *History of the Silaharas*—1936, *History of Banaras from Earliest Times*—1937. Apart from his major publications on political and cultural history of ancient India, he edited fifteen valuable inscriptions and contributed about fifty articles on numismatics. Professor Altekar's association with the Banaras Hindu University was so intimate and of such a long standing that it was difficult for him and his family to think of leaving Banaras, but due to a conspiracy of circumstances, he reluctantly decided to join the Patna University in 1949 where he was earnestly invited to organise a new department of Ancient Indian History and Culture.

Joins Patna University

Before Professor Altekar left Banaras, he had begun writing two of his best books which were completed at Patna. These are the *Catalogue of the Gupta Gold Coins in the Bayana Hoard* (1954) and *The Coinage of the Gupta Empire* (1957). The Bihar Rashtrabhasha Parishad had published the Hindi version of the latter already in 1954. The work on the Bayana hoard won for him the Chakravikrama gold medal of the Society.

Patna also afforded him with new opportunities. He embarked on a new career as an archæologist and made his first debut at Kumrahar with the help of Sri Krishna Deva an old student of his. And then one after another he excavated Vaishali, Sonepur, etc. and trained a band of young students in archæology. He brought new life in the Bihar Research Society and became the first Honorary Director of the Jayaswal Research Institute. With the latter institution under him and the Department in the University, he was able to plan a regular programme of archæological excavations and explorations. Gradually, he organised the archæological section of the K. P. Jayaswal Institute on a permanent footing and the State government appointed him the full-time Director of the Institute in 1957.

As the Director of the Institute, he organised two schemes one of bringing out a comprehensive history of Bihar and another of editing the Tibetan manuscripts lying in the Bihar Research Society. It will not be an exaggeration to say that Professor Altekar's presence in Bihar was responsible to a great extent for the popularisation of the study and research in ancient Indian history, culture and archaeology and he was greatly instrumental in influencing the State govern-

ment to take interest in and support such schemes which have shown and are bound to give valuable results. He also edited *Bihar through the Ages*.

Contribution and Recognition in the Field of Indology

Prof. Altekar served the field of Indian numismatics with an abiding interest ever since he joined the Numismatic Society of India in 1931. When the Society decided to publish its own independent journal, right from its second volume in 1941 he was its editor. He was awarded the Nelson Wright Medal in 1945 for his numismatic researches. In 1947 he assumed the Chairmanship of the Numismatic Society of India.

No doubt his contribution to the Numismatic studies in India and his role in building up the Numismatic society of India, of which he was the Chairman for twelve years and of whose Journal he was the editor for about twenty years, stand out as most creditable. It is no exaggeration to say that during the last ten years the Society was almost identified with him and in whatever stage the Society stands now it is mostly due to his untiring efforts and enthusiasm. By persistent attempts with the Government, he raised the funds for the activities of the Society and whatever money we have for the building of the Society was raised by him and again it was a result of his negotiations that we have funds, even though modest, to celebrate our Society's Golden Jubilee, which unfortunately he is no more with us to participate in.

Professor Altekar was associated with many academic projects of publication. He was intimately connected with the scheme of the New History of Indian People of the Bharatiya Itihasa Parishad; he contributed to the History and Culture of the Indian People of the Vidya Bhavan series and wrote chapters on ancient history for the revised edition of the Bombay Gazetteer. He was one of the key organisers of two great projects which are bound to appear in reasonable time i.e., the Corpus of Indian Coins series of the Numismatic Society of India and the Comprehensive History of Bihar of the K. P. Jayaswal Institute.

Professor Altekar's merit was highly recognised in all the branches of Indological research and he was elected President of the Ancient Section of the Indian History Congress (1940), twice President of the Numismatic Society of India (1946 and 1947), President of the Ancient History Section of the Oriental Conference (1949), and as General President of All-India Oriental Conference in 1957 and of the Indian History Congress in 1959.

The valuable services of Professor Altekar to Indology were not only recognised and admired by the people but also by the Government. He was nominated member of a number of committees associated with Indian culture and archaeology. He was commissioned by the Indian Government to visit West Indies to deliver lectures on Indian Culture in 1954.

Visit to Foreign Countries

Professor Altekar went abroad twice. In 1954, he went to the United States of America under Fulbright and Smith-Mundt assistance programme. He was invited as a Visiting Research Fellow at the Yale University where he took seminar classes on various aspect of Indian history and culture, law and jurisprudence. He also delivered two lectures on "Prospects of India as an independent nation" and on "India and the world affairs" under the Woodward Foundation. He delivered 3 lectures at the Harvard University and he also lectured at the Pennsylvania University. On his way to and return from the United States of America he spent some time also in the United Kingdom, and which opportunity he successfully utilised in making a rapid examination of ancient Indian coins in the British Museum and delivering lectures at the School of Oriental and African Studies, University of London. In Paris also he had a quick glance at the coin collections of the Bibliothéque Nationale and Musée Guimet.

He went to West Germany in 1957 on the invitation of the Government of the Federal Republic of Germany to contact and advise on the oriental studies and gave a series of lectures at various places.

He was a corresponding member for the "History of Mankind" project of the Unesco and he took active interest in the preparation and formulation of its policy and nature so far as the chapters dealing with India were concerned.

As a Social and Cultural Historian

Professor Altekar made his mark as a historian of social and political institutions of ancient India. And in this task he was not only thorough and painstaking but critical and conscientious. He believed in social reforms, which could influence, and perhaps it did, the historian in him but, no doubt, he did his best, conscious as he was of his ideas, to be an objective historian first and a reformer later. This is clear from his preface and more from the actual treatment in his

books. In the preface of his *Position of Women in Hindu Civilization*, he writes :

"Each chapter deals with the history and development of its topic from the earliest times to the present day, and then suggests at the conclusion the lines on which the present-day problems connected with it should be solved.

"The subject matter of the book bristles with controversial topics, and it is quite possible that some of my readers and reviewers may not agree with me in my conclusions. Some of them may think that I have been rather partial to ancient Hindu culture; others may hold that I have been unnecessarily severe in exposing its defects. Some may feel that the remedies suggested are too drastic; others may opine that they do not go far enough. These differences of opinion are, however, inevitable. I would assure both the reader and the critic that it has been my constant endeavour to treat the subject as impartially as possible. Limitations of our culture have not been passed over, nor its excellences magnified, nor vice versa. The historian can hold no brief either for the past or for the present, either for the East or for the West."

So also in *State and Government in Ancient India,* he notes :

"This is attempted in the concluding chapter, which first gives a survey of the administration from age to age and then gives a general estimate of ancient Indian polity and its achievements. Lessons suggested by this general survey and the critical estimate are also stated at the end, so that they may be useful to us for the present as well.

"The book is mainly a research work, which documents all important statements it makes and seeks to throw fresh light on several important and obscure points. The subject matter, however, has been presented in a manner calculated to be attractive and intelligible to the general reader as well. It is, therefore, hoped that the book will appeal both to the general reader and the scholar, as was the case with my books on Education in Ancient India, and Position of Women in Hindu Civilization."

Professor Altekar not only found justification for modern Indian values and ideas in the past but sanction of the past for the implementation of modern demands on society etc. He said on one occasion, "Even the foreign policy of free India is unconsciously influenced by our heritage. Our unceasing effort to promote the cause of international peace is vitally connected with our ancient ideal embodied in the

well-known verse, "May all people be happy, may no one suffer from disease, may every one attain what is auspicious, may none meet with sorrow and calamity."

And he wrote in his article on *The Attitude of Hindu Scriptures towards Social Reforms* that "the Hindu Śāstras did not regard their rules about social customs and institutions as too sacrosanct to be touched by the posterity. They were not only far-sighted enough to recognise that changes in their rules would become necessary, but they have also described the machinery which society was to use for the purpose. Hindu society was making use of that machinery or its equivalent down to the Muslim times and was, therefore, a living and vigorous organism. The present-day complications have arisen because the social machine has been practically left neglected and unrepaired for the last eight hundred years. Faced with the present social and socio-religious problems which are threatening its integrity and solidarity, Hindu society would be acting, not only in a suicidal but also anti-scriptural manner, if it refuses to get them investigated by modern *śishtas* like Mahatma Gandhi or Pandit Madan Mohan Malaviya with a view to follow the solution proposed by them. Personages like those just mentioned, who have deep reverence for the ancient culture, tradition and civilisation, and who also realise the needs of the present situation, have, according to the Smṛiti view, every right to give rulings on doubtful or new points. In the cases of conflicts between the Śāstric texts, as in the case of the marriageable age of the bride, they have a right, according to Vyāsa, to pronounce which of the texts are to be preferred in the present age. Nay, when we remember the dictum of Manu that even Dharma is to be abandoned if it leads to unhappiness or is hated by the population in general, the present day Parishad of *Sishtas* would be justified even in recommending a course of conduct which, though going against the letter of any particular Śāstric text, may be now found to be in the best interest of Dharma and society. May it be hoped that the leading lights of Hinduism will realise this duty imposed upon them by Smṛitis and meet in a Parishad to review the whole situation and pronounce their authoritative views on the points of the present-day controversies ?"

He did not want to keep himself aloof from controversial issues of social reform ; on the contrary, he felt it his duty to come forward with what the scriptures had to say on a particular point of topical controversy and produce the rationale in favour of liberal reform. It was this spirit which led him often to write on such subjects as Non-Brahmin and the right to study the Vedas, Daughter's right of inheritance, Reconversion in Hinduism, and so on.

As an Archaeologist-cum-Historian

In the last phase of his life, Professor Altekar took to archaeology and we can see the influence of his new love in the Presidential speech of History Congress. He never belonged to the orthodox school of non-archaeologist historian of ancient India, but previous to taking interest in field archaeology he was only a table archaeologist and utilised to the maximum the numismatic, epigraphic and early archaeological evidence. But when the new period of scientific archaeology started in India, Altekar was quick to realise its importance and although while at Banaras he had not begun taking active interest in field archaeology, he was keeping himself in close touch with the new line of progress and he sent his students like Dani, myself, Ratna Chandra Agrawala and others for training in the technique of field archaeology in the excavations carried under the auspices of the Department of Archaeology, Government of India. When Wheeler visited Banaras the first time, he introduced one and all of his post-graduate students. But it was in Patna that he got his opportunity to take direct interest in field archaeology and in the course of a year or so he started independently and actively. At first he did not believe much in archaeology for archaeology's sake. To him, it was only a means to an end, a source of history. But gradually he came to enjoy archaeology and even at an advancing age he beat his younger colleagues in physical alertness and untiring pursuit. He was even planning to initiate himself into the mysteries of pre-history and had ideas to explore the Chhota Nagpur region. All these new interests in fact made Altekar younger in spirit and he was ready to learn from his own students.

But because his first discipline was that of epigraphy and Sanskrit and later of numismatics, when he came to archaeology he was in a better position to take an all-sided picture of ancient history and culture and took a synthetic view of his evidences in reconstructing history, reconciling one with another without any fear of criticism and without being afraid to criticise. He has given expression to his approach when he notes:

"Among the famous archaeologists of the day, Wheeler and Piggot can hardly conceal their distrust of the literary evidence. The former regards the search for literary contents in support of an archaeological evidence as a great risk The latter regards the literary and philological evidence as dangerous ground full of quicksands and pitfalls which have too often trapped the unwary and not infrequently the would be wary too. Archaeologists like D. H. Gordon, who frankly

confess that 'almost all interpretation of the archaeological materials of these early times is in fact speculative' are few and far between.' For getting a correct solution, however, we must try to harmonise the archaeological evidence with the traditional, a procedure which is described as perfectly justifiable by Sir L. Wooley... .."

He was not a Purāṇic enthusiast of the extreme type but he was also not the prejudiced unbeliever for he studied the Purāṇas to look for constructive evidence, neither to extoll it uncritically nor to reject it without actually taking pains to go deeper into it. His scepticism made him cautious and his liberalism made him accept every evidence for whatever worth it was. He writes emphatically, 'we can certainly utilise the Paurāṇic genealogical lists for getting a rough idea of the Aryan advent and expansion and an account of some of the main events of the age'. While comparing that there was a tendency to ignore the Sumerian scribe's lists for a long time and how late, with increasing archæological discoveries, the archæologists had to admit that "the native kings' list is beyond doubt a historical document, the reliability of which, despite difficulties of details, is likely to be more and more established, as our knowledge of the earliest period advances", he notes that, 'as in the Sumerian lists, so in the Paurāṇic ones also, some kings may have been omitted, contemporary dynasties may have been represented as successive at some places; occasionally branch dynasties may have been amalgamated with the main stock. In spite of these possible defects, we should *prima facie* regard these lists as embodying the kernel of a fairly reliable historical tradition preserved with considerable care by the Sutas...We may not find the place of Janamejaya or the seal of Marutta ; but we cannot prove that these kings were unhistorical."

A Man of Vision

Altekar looked to future with great hopes and confidence but he was also aware of our limitations and defects. And he did not mince words in saying so even in his private life. In his last written statement, he noted :

"From the point of promotion of research in history, we have yet to make considerable improvement. There are about 40 universities in the country, each of which trains students to the standard of the research degree. Very few of them are, however, properly equipped for the task. Research guides have too heavy teaching work...Many of the latter (research students) undertake research not because they are properly equipped for it, but because they have

nothing else to do....Library facilities in most places are poor. It is high time that the University Grants Commission should encourage the formation of real centres of research in different subjects at different universities. Each of these centres should have lecturers in three of the following languages, French, German, Russian, Dutch, Portuguese, Chinese, Tibetan and Japanese....Students should be selected for admission, not because they can afford to finance the course, but because they possess real aptitude for research....

"Documentary material for medieval and modern history is scattered in cities like London, Paris, Lisbon, Amsterdam, etc. and dilapidated houses of a number of old historical families in the country, the present heads of which do not always appreciate its value. It is high time to make a library of the photo static copies of this valuable material, so that the researchers in the country should not find it necessary to go abroad or to different places in the country in order to utilise it.

"In our post-graduate courses we do teach history of China, Japan, Indonesia, Middle East, Europe etc. But this study is usually second hand. Nations like Great Britain, France, Germany, U.S.A. have made abiding contribution to the history of countries other than their own. Is it not high time that we also should start doing so at least in the case of history of countries in our neighbourhood?...

'More after all depends upon the will, capacity and determination of research worker than on the facilities, amenities and prospects offered to him. Members of our fighting forces and administrative services have also to emulate in larger numbers the example of Cunningham, Fleet and Smith......"

Dr. Altekar also gave radio talks, and popular lectures, and wrote popular articles in English, Hindi and Marathi. The topics of these ranged from subjects on ancient Indian history and culture to Indian freedom movement, present-day political parties and their objectives, modern Indian renaissance, India and the world affairs.

Personal Qualities

Professor Altekar was not only a scholar, patriot and a man of liberal ideas but also a great teacher. He followed the ancient Indian ideal of the relations between the teacher and taught. There is hardly a student of his who has not felt the warmth of his affection. He loved to work hard and he loved his students to work harder.

But greater than everything, he was a man of sterling qualities. His honesty, simplicity and straightforwardness made him one without enemies. He was fearless in his criticism. He did not hide his feelings just to be tactful. Yes, if there was any defect in his character, it was his child-like simplicity, lack of what one likes to call 'polish' these days and blunt expression of his feelings; yet he was never rude. He was kind, paternal and sincere. It gave him the greatest pain if he got the slightest idea that some one is hurt on account of him even indirectly and without his fault, and he would take steps to allay it and compensate it in one way or another, sooner or later.

Professor Anant Sadashiv Altekar was verily a great scholar, but as a man he was greater.

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PUNCH-MARKED COINS IN INDIAN ARCHÆOLOGY

AHMAD HASAN DANI

S. C. Ray has done a very valuable service by bringing together the stratigraphic evidence of coins of Indian excavations[1]; but his work would have been of greater value, had he critically probed into the bases of fixing chronology to the various strata in the excavations. With the advance in our knowledge of the Indian archaeology it is hardly possible to talk in terms of Mauryan, Kushāṇa and Gupta. These terms need to be further defined in cultural space and time, as the way has already been shown by B. Subba Rao[2]. The basic chronology of the North Indian excavations of the early historic period is founded on triple evidence[3]—(i) the date of N.B.P. ware, (ii) the occurrence of the punch-marked coins, and (iii) the palæography of the letters appearing on coins and seals. In general the excavator falls back on coins to date his N.B.P.; and the numismatist has been repeating the words of John Allan on the date of palæography as if Allan's[4] statements are final. But palæography of the coin legends cannot be reduced to a definite chronological boundary. In fact the advance in our knowledge of many technical processes needs a new study of the palæographical evidence.[5] It is no longer possible to wait on a palæographer to date an archæological stratum. The excavator must build up his own scheme of chronology on the totality of evidence found by him. Similarly a coin is only one such element in a given culture—an object which can remain current for many years after it was issued. Hence the discovery of a datable coin may define the lower limit of a stratum but it can hardly specify the upper date.

It is precisely for this reason that an attempt was made by the present author to analyse the evidence of Taxila excavation on the dating of the two coin hoards.[6] But it seems my conclusion has led to some misconception. The fact that the two deposits have been shown to be post-

1. S. C. Ray, *Stratigraphic evidence of coins in Indian Excavations and some allied issues*, NNM 8, Varanasi 1959.
2. B. Subba Rao *Personality of India*, 2nd ed.
3. This conclusion is inferred from the reports of the various excavations published in India.
4. *British Museum Catalogue of Indian Coins, Ancient India*, 1936.
5. The present author has made such a study of Indian Palæography, which is to be shortly published.
6. *JNSI*, Vol. XVII, pp. 27-32.

Mauryan in date, appears to have misled scholars that I had been trying to attribute these coins to post-Mauryan date. This is far from truth. The Taxila evidence discusses only the chronology of the Bhir mound and places the deposits within that chronology. Apart from this I have analysed the punch-marked coins on a technological basis[1] and attempted to establish a sequence of evolution. Unfortunately the Indian excavators never pay heed to such technological classification, when they mention the discovery of a coin in a particular dig and it becomes very difficult to judge from the scanty report what particular type is meant by their general reference to punch-marked coins. P. L. Gupta[2] in his latest article, however, has divided chronologically the two most significant types of the punch-marked series. There cannot be any dispute on the point that his Class (1) is definitely earlier than his Class (3). This fact must be borne in mind by all the excavators because it is they who can really supply us with the material cultures associated with these two different types of coins, and it is the study of the total culture that will enable us to determine a definite chronology.

Taxila Evidence

It will be helpful to understand the present confusion first of all in order to make our path clear for definite proposals. As Taxila holds the clue to important dates, I will begin with the evidence available from the Bhir mound. As my analysis[3] of this site has been challenged,[4] I will ignore my earlier arguments and start with the new contention of F. R. Allchin[5] who maintains that stratum II belongs to the Mauryan period. His main argument is based on the fact that in this stratum are found the later silver punch-marked (i. e. Class 3 of P. L. Gupta) coins in the usual dig showing that the coins were actually current during this phase of the city. These coins are other than the hoard deposits. Let us accept this proposition for the time being and consider its consequence. In this very stratum are found 134 'local' copper coinage.[6] If this currency is an integral part of the stratum, it must also be attributed to the Mauryan period. But how many numismatists will agree to this view ? I quote

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5. F. R Allchin, 'Upon the contextual significance of certain groups of ancient Indian coins', in *BSOAS*, Vol. XXII, pt.-", pp. 548-55 ; and in his latest paper contributed for the symposium on the Date of Kanishka held at the School of Oriental & African Studies, London, 1960, which is to be published shortly
6. J. Marshall, *Taxila* p. 756.

two opinions: Marshall writes, "It would be unsafe, therefore to infer that any of these local coins of Taxila were struck before the third century B. C., but from that time on until the coming of the Greeks, and perhaps for sometime afterwards they must, to judge by the numbers recovered, have been issued in abundance. Allan (*B. M. Cat*, p. cxxxix) says that this coinage was seemingly a short-lived one, beginning late in the third century B. C., under Maurya governors and ending with the Greek conquest before the middle of the second century B.C."[1] But in another place Marshall writes as follows: "To this period of independence (c. 225-183 B. C.) are probably to be ascribed the rare copper coins which bear the legends *negama*, *pañcanekame*, *Hirañasame*, and probably also a great many of the local uninscribed copper coins as well, *though the simpler types of the latter appear to date from as far back as the Maurya period*, and others may not have been issued until after the advent of the Greeks."[2] (Italics mine). On referring to the chart (pp. 760-61) published by Marshall, I found only one coin bearing the legend *Hirañasame*, and three coins bearing the legend *Pañcanekame*, all of them found either in the late Sirkap level or on surface, but none in Bhir mound. If this is the fact, what is the basis for Marshall's conclusion? Obviously it is the opinion of Allan that has waved his mind. If this inference is correct, what does Marshall mean by "the simpler types of the latter"? He has not given us any classification of these coins but left the whole question vague. The numismatists can either hold fast to the opinion of Allan or completely revise their idea of these coins by attributing them to the Mauryan period and consequently accepting that the practice of issuing local currency over and above the imperial coinage was allowed by the Mauryans. A clear statement on this point will clarify many of the confusions that we have today.[3]

The Evidence from the Gangetic Valley

The second confusion is also linked up with the above issue. This is with regard to the numerous discoveries of the coins in actual excavations in the Ganges Valley. Broadly

1. Ibid, p. 756.
2. Ibid, p. 26.
3. Allchin in his latest paper writes, "The 'local Taxilan' copper currency includes several varieties, cast, die-struck, etc. We have shown elsewhere that the cast copper coins are not 'Local' but have every right to be regarded as the copper currency of the Mauryan dynasty, derivatives of which were made for several centuries and include the 'Tribal' copper coinage." The reference in this quotation is to his hypothetical proposal that the crescent-on-hill symbol is Mauryan and hence the coins bearing this symbol, at least some of them are Mauryan. It is difficult to understand why Allchin should take only Cast coins to be Mauryan and leave other coins of the group as post-Mauryan.

speaking there are three main types of the coins found: (1) the debased silver currency (Class 3 of P. L. Gupta), (2) the uninscribed cast coins, and (3) the inscribed copper coins. For the dating of the inscribed coins the general reliance is placed on Allan, who on the basis of palæography has attributed some to the second and a few even to the late third century B. C. Obviously nos. (1) and (2) are earlier than no. (3), and hence the former go back to the 4th-3rd century B. C.,[1] if not earlier. Now why should we date the inscribed coins, which are decidedly of the local rulers, to late 3rd and early 2nd century B. C.? Palæography is a loose basis. Let us analyse the historical perspective. The Mauryan empire in the Ganges Valley was in power until at least the death of Aśoka. Hence the un-inscribed coins could not have been issued prior to his death unless, of course, we are prepared to accept that they were Mauryan issues. If the latter is acceptable, what coins were issued during the remaining period of the Mauryan rule and during the sovereignty of the early Śuṅga rulers, who started their career in 184 B C.? If the inscribed coins of Kauśāmbī, Ayodhyā, Mathurā and other places are assigned to early 2nd century B. C, it would mean that the Suṅgas had no authority at all even in the main Ganges Valley. This can hardly be asserted in face of the Ayodhya Stone inscription[2] and Bharhut pillar inscription of the time of the Śuṅgas.[3] It is on this ground that the reconstruction of the history of the Mathuras and Pañchālas, as given by A. K. Narain[4], on the basis of the *Gārgi Saṁhitā*, cannot be accepted. It is far more reasonable to accept the upsurge of these petty states in the Ganges Valley over the destruction of the Śuṅga empire caused by the invasion of the Indo-Greeks, which Narain dates to about 150 B. C. It is also reasonable to accept that this penetration of the Indo-Greeks into the heart of India led to a new technical evolution in the coinage of the country with the result that hence-forward we begin to get inscribed and die-struck coins. It is not possible to be more precise on this point. This date can be accepted as a workable basis for establishing the chronology of the petty states that rose in the Ganges Valley with the break-up of the Maurya-Śuṅga empire If this interpretation is accepted by the numismatists, it will go a long way in helping the excavator to establish the chronology of the various strata in the field excavation.

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1. This is the usual conclusion in almost all the excavation reports published so far.

2. D. C. Sircar, *Select Inscriptions*, p. 96.

3. *Indian Antiquary*, Vol XIV, 1885.

4 See his *Indo-Greeks*, Oxford, 1957; and my review of this book in *Journal of the Asiatic Society of Pakistan*, Vol. II, 1957, pp. 197-200.

Copper Coinage in India

The tribal series of coinage is technically related to one another. The coins are either die-struck, cast or incuse-stamped. On looking through Allan's *Catalogue* I found that all these are copper issues, except the following:

Allan's pl. XIV. 13-17 are coins of the Audumbaras; pl. XXII, nos. 1-8 are coins of the Kuṇindas; and pl. XXV, nos. 8-11 are coins of Gomita from Mathurā, —all these are silver currency issued in imitation of the Indo-Greek series. Three coins of Almora (Allan, pl. XIV, nos. 7-9) in base silver are late issues as are the base silver coins of the Mahākshatrapa Rājuvula from Mathura (Allan pl. XXVI, nos. 7-12). There are only four silver coins from Ujjayini (Allan, pl. XXXIII, nos. 15-17, one is not illustrated), which show the same technique as the uninscribed copper coins from this place. But the new influence is easily discernible not only in the systematic grouping of the symbols but also in the figure of Kārttikeya (?) that appears in the coins—an iconographic representation which is completely absent from the punch-marked series characterised only by symbols. Leaving aside these exceptions, the entire tribal series is a copper currency. This series is directly related, as has already been concluded by earlier numismatists, to the uninscribed cast coins, which are also in copper. The relation is further borne by the fact that the technique of casting is also seen in some of the tribal coins. It is therefore natural to suppose that they are either contemporary or immediate predecessors of the tribal series. But this metal also relates the cast coins with the punch-marked copper coins on the one hand and the debased silver coins (class 3 of P. L. Gupta) on the other. Either they are all contemporary or related in time in some other way, the latest limit of these coins being 150 B. C. as far as the date of their issue is concerned. What should be the earlier limit of these coin types?

Allan has pointed out the intimate relationship between the punch-marked copper coins and the debased silver currency and has vaguely hinted that they probably belonged to the same period. Recently F. R. Allchin[1] has once again drawn our attention to the occurrence of 'crescent-on-hill' symbol along with others on debased silver currency and cast copper coins, and has further argued for their Mauryan context mainly on the basis of the Rampurva bolt and Kumrahar pillar marks, the other examples quoted being

1. *BSOAS*, Vol. XXII, 1959, pp. 548-55. It was first proposed by Durga Prasad, See *JASB*, 1937, pp. 51-92.

decidedly doubtful. While it is reasonable to accept the Rampurva bolt and Kumrahar pillar as belonging to the Mauryan period, it is fortuitous to speak of the royal symbols being adopted by the masons and metal smiths, as Allchin would like to have us believe. At least there is no other example in Indian archaeology and history of any royal symbol being adopted by masons. And what evidence is there for calling this symbol royal ? It it was a *rājāṅka,* as Allchin believes, it has not been described at all by Kauṭilya, nor is it found anywhere on the well-known Aśokan inscriptions. It seems strange that the royal symbol is conveyed to us not through the royal rescripts but is left to the poor mason and the smith to conceal it beneath the profane eye only to be discovered by a modern archaeologist ! There is nothing special in 'crescent-on-hill' symbol. It may be unique in the English atmosphere, but in the Indian horizon it is common to see either the setting sun behind a hill or a crescent perching on the hill top, and it is natural to adopt such a beautiful scene for a symbol Therefore I would not bind myself with a obsession of this symbol and say that the coins, in which it appears, should date from the Mauryan period onward. It is not possible to give an earlier limit to these coins only on this basis

The literary evidence from the *Arthaśāstra* has often been quoted to support the Mauryan currency. The passage quoted below speak of two types of coins :

(i) लक्षणाध्यक्षश्चतुर्भागताम्रं रूप्यरूपं तीक्ष्णत्रपुसीसाञ्जनानामन्यतमं माषबीजयुक्तं कारयेत् पणमर्धपणं पादमष्टभागमिति । II. 12-27. This passage speaks of a *rūpya-rūpa* (silver coin) made up of a fourth part of copper and one sixteenth part of other metals (mixed with silver), divisible into *paṇa, Ardha-paṇa Pāda* and *Ashṭabhāga.*

(ii) पादाजीवं ताम्ररूपं माषकमर्धमाषकं काकणीमर्धकाकणीमिति । II. 12-28. This passage speaks of a *Tāmra-rūpa* (copper coin) made with ¼th alloy, divisible into *Māshaka, Ardha-māshaka, Kākaṇī* and *Ardha-kākaṇī.*

Allchin argues for identifying the debased silver coins with no. (i) and the uninscribed cast coins with no. (ii), but what about the punch-marked copper coins ? The last has a greater similarity with the debased silver currency as both of them are marked with five symbol design, while the cast coins show no such regular system. If we like to accommodate all the three within the description of Kauṭilya, the problem of the exceptional arrangement of symbols on these cast coins, as seen in the local Taxilan issue, remains unexplained. The

difficulty can be resolved in the same way, as it was done in the case of Taxila, by taking the five-symbol coin as the imperial issue and the cast coins as the local currency. This assumption must account why the imperial mint masters did not adopt the process of casting. On the other hand it should be noted that whatever examples of coin moulds have been found in India, all speak of a much later date.

The Evidence from Excavations

The recent tendency in excavation reports has been to date the excavated materials on the basis of P. G. ware (roughly 1000 B. C. to 600 B. C.), N. B. P. ware (roughly 6th to 2nd centutry B. C.), inscribed coins of the local rulers (2nd century B. C. to 1st century A. D), Kushāṇa coins (1st-2nd century A. D.) and so on. Not only the whole chronology is hypothetical but the big margin of three to four centuries in each period robs the pottery dating of its real value and eludes the scholars from fixing a definite date to otherwise reliable material. However, the present attempt is a great improvement on the older practice. I will discuss the evidence of the important sites one by one, basing entirely on the frugal published reports.

KAUŚĀMBĪ : Kauśāmbī, lying in the heart of the Gangetic valley, should come first. Of the three early strata in Kauśāmbī[1] the first stratum is marked by P. G. ware, the N. B. P. being confined to the last sub-period. The second stratum, which is said to begin from layer 16 is the full blooded N. B. P. period. In this period "from layer 12 of the site to be followed by successive four layers come uninscribed cast coins and from layer 11 to 8 the lankey bull coins, typical of Kauśāmbī."[2] Period III is marked by inscribed coins, which, according to our chronology, should date from after 150 B. C. The lankey bull and cast coins begin in the later phase of N. B. P., and hence the two can hardly be coextensive in date. It is difficult to understand the basis of attributing these coins from 4th century B. C. to 2nd century B. C. We are certain only of the upper limit of about 150 B. C.

HASTINĀPUR : The report published by B. B. Lal[3] enables us to understand the occurrence of these coins in a better way. As shown in the section (his plate XXIII) by Lal and

1. *Indian Archaeology, a review*, 1958-59, pp. 46-47 ; *Ancient India*, nos. 10 & 11, pp. 22-23.
2. S. C. Ray, *Stratigraphic Evidence of Coins*, p 11.
3. *Ancient India*, Nos. 10 & 11, p 54-55.

detailed in his description, the punch-marked (debased) coins and the uninscribed cast coins begin to appear from the early period in stratum III, which has also yielded for the first time at this site N.B.P. ware. If this section is correct, the N.B.P. is coextensive in date with these coins at Hastināpur, but on page 51 of his report Lal observes, "Punch-marked coins which range, in the main, between fifth and second century B.C. were also found in association with these (i.e. N.B.P.) sherds, a few of which were also recorded below the lowest occurrence of punch-marked coins. The industry, therefore, preceded the usage of punch-marked coins here." The detail of the coin finds is given below :

Stratum III	Early level	1 debased silver with crescent-on-hill and other symbols.	2 uninscribed cast coins, one of which had crescent-on-hill
	Late level	...	3 uninscribed copper coins.
Stratum IV	5 Mathurā copper coins with Rājño Śesha-datasa from an early level.	2 debased silver one of which has crescent-on-hill symbol.	2 uninscribed copper coins.

It is difficult to understand why Lal refers the introduction of coinage in Hastināpur to 5th century B.C. There is no basis for such an assumption except probably on the presumption that wherever N.B.P. is found, it should be dated to 6th century B.C. This need not be the case at Hastināpur where the city was occupied long after the destruction of P.G. ware level in stratum no. II. Moreover the relation of the punch-marked coinage and N.B.P. is hardly detailed except by the one sentence quoted above. Such an important point has been left vague on the bold assumption that "the revised date of the N.B.P. ware may, therefore, be taken as early sixth century B.C. to early second century B.C.' Here at Hastināpur, as it was at Kauśāmbī, what is certain is the stratum dated by the inscribed coins. The dating again should not be dependent on palæography but on the general historical evidence.

Purānā Qilā : The sequence of Hastināpur appears to have been repeated at Purānā Qilā[1] as far as the coins are concerned. The second stratum, which is marked by the N.B.P. ware yielded punch-marked and cast copper coins

1. *Indian Archaeology, a review* 1954-55, pp. 13-14.

"from the early stages'.[1] The later stages produced coins of Mathurā, Yaudheyas and the Kushāṇas. The problem here is the same as it is at Hastināpur.

Rupar: A detailed report of the site[2] is still awaited. Here the third stratum, characterised by the N. B. P. ware yielded punch-marked and cast coins, inscribed seals and terracottas. The succeeding period began with the find of the coins of Antialcidas, who is generally assigned to the last quarter of the second century B. C. Obviously the third stratum is earlier than this date. But here again we do not know the type of the punch-marked coins found and their exact relation with the N. B. P. ware.

Ahichchhatrā: Out of the nine strata[3] dug up at this site the earliest level did not yield any coin. In stratum VIII were found "a fairly large number of round cast coins with simple symbols", and in stratum VII "square coins with more elaborate symbols in addition to the round ones." The main evidence for dating comes from strata VI and V, which yielded Pañchāla coins mixed with cast coins, and hence A. Ghosh assigns these two strata to 100 B. C. to 100 A. D. But the distinction between the round and square cast coins made here is nowhere else chronologically distinguished in the Ganges Valley or even outside. The simpler designs are found both in round and square cast coins (See Allan, pl. XI), and the elaboration of the symbols is also seen in both the shapes, as can be gathered from the tribal coinage illustrated by Allan. Hence the chronological distinction made at Ahichchhatrā is not above suspicion. Whatever may be the case, the dating does not carry us much further.

Maheshwar and Navadātolī: The excavations[4] at these sites in the Western Deccan typifies the cultural details found in this region. The summary of the coin finds given by S. C. Ray[5] leads us nowhere as he lumps up all the coin types together and refers them to period IV of Maheshwar. But P. L. Gupta has given a better analysis[6] which can be checked from the excavation report. He has rightly hinted at the earliest coin find in layer 15 (but in the chart Fig. B 1 it is shown in layer 14), and the punch-marked square copper coin (Class 3 of P. L. Gupta) with one symbol

1. S. C. Ray, *Stratigraphic Evidence of Coins*, p. 12.
2. *Indian Archaeology, a review*, 1953-54, pp. 6-7.
3. *Ancient India*, no 1, 1946, pp 37-40.
4. H D. Sankalia. B Subba Rao & S. B. Deo, *The Excavations at Maheshwar and Navadatoli*, 1952-53, pp. 66-79.
5. S. C. Ray, *Stratigraphic Evidence of Coins*, pp. 9-10.
6. *JNSI*, Vol. XXI, 1959, pp. 118-19.

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being 'crescent-on-hill' in layer 13, while the uninscribed cast coins are found still later. The N. B. P. ware is also found from layer 15 onward. If the section at Maheshwar truly represents the cultural evolution of the coinage, as P. L. Gupta believes, then we can conclude that the silver punch-marked coins are earlier in date than the square copper coins. We can again legitimately infer that the square copper coins are earlier in date than the uninscribed cast coins, If this is true, then wherever the two are found together in stratified excavation as at Hastināpur, Purānā Qilā and other places in the Ganges Valley, the actual date of the stratum should be that of the uninscribed coins.

As far as the silver coins are concerned, their early dating is established by a simple rule of economics, from which we learn that the bad coins always displace the good coins. Hence the silver coins prove to be earlier in date than the debased silver currency, and this factor again explains the shortage of the earlier currency in actual excavations.

P. L. Gupta argues on the basis of C. 14 date that the silver coin should be dated to B. C. 300. Even if we accept this date for the silver currency, that does not in any way establish the date of the hoard deposit at Taxila. The latter must be dated on the basis of the local stratigraphy.

From the above analysis of the excavated materials in the Ganges Valley and the Western Deccan we can derive the following conclusions :

(1) The silver punch-marked coins are the earliest in date.

(2) The debased silver or copper punch marked coins with crescent-on-hill as one of the symbols are next in the series.' These are either earlier in date, as evidenced from Maheshwar, or contemporary with no. (3), i. e. the uninscribed cast coins, as evidenced in the Ganges Valley, and in the latter case they continued right up to B. C. 150 at least.

Now we come back to Taxila. Here also the N. B. P. sherds are found much earlier in the strata than the punch-marked coins. This evidence fully agrees with the result known from Kauśāmbī. But what types of coins are they ? Apart from the hoards, the dates of which are under dispute, we know only debased silver currency and cast or local coins both in Taxila and Kauśāmbi (the silver bar and round and concave coins of Taxila have been omitted here as they are decidedly earlier in date). Hence it may be conceded that the date of the N. B. P. ware is probably earlier than that of the coins. The earlier limit of these coins is

coeval with the date of stratum II of the Bhir mound, which must be fixed on the general evidence of the material culture found in the context of Taxila. We must define the extent of the cultural horizon and finally determine the cultural reciprocity with other regions. There is plenty of material in stratum II and stratum I of the Bhir and the early levels of Sirkap, which establishes relation with the growing Graeco-Roman influences in Western Asia. The hoard deposits are no exception to this type of the material culture. They have to be related to the cultural context of the city. Hence I do not agree with Dr. S. C. Ray, when he says, "Since stratigraphic context is of an uncertain nature, the internal evidence of the hoards alone can be taken to point towards a *reasonable date* of their burial."[1] In this internal evidence also the only valid basis is said to be the date of the issue of the coin, when it is well-known that the coins can be hoarded for generations together. However, I wonder how many archaeologists will like to waive the evidence of the cultural context, which alone is the essence in stratigraphy, and adhere to a whimsical date of an object found ? At least I refrain from being one and see no chance of the 1924 hoard to be attributed to stratum III of the Bhir mound, as has been done by Marshall on a second thought. From the list of charts published by Marshall, the hoard materials remain unconnected with the cultural milieu of stratum III. Apart from these related materials, like the gold and silver jewellery, the very fact that the hoard was "found near the top of the third stratum"[2] would ordinarily lead the excavator to keep it in the second stratum. Thus I do not see why this hoard of coins should be placed in the third stratum.

If this stratigraphic position is accepted, the probable date of the different strata can be worked out. The earlier limit of the second stratum is defined by the coins of Philip Aridaeus and Alexander the Great, i. e. the time when these coins could possibly come to Taxila. And this time need not fall during the reign of Alexander or Philip unless, of course, coins have been special imports. But there is no necessity of such an assumption because the materials in the hoards are quite in keeping with other finds made in stratum II. Therefore the hoard deposits must relate to the time when the western commerce started in right earnest. P. L. Gupta[3] likes to refer this period to at least the beginning of the Mauryan rule, especially after Seleucus' abortive Indian venture, while I have earlier argued for a date after the

1. *JNSI*, Vol. XXI, p. 124.
2. Marshall, *Taxila*, p. 110.
3. *JNSI*, Vol. XIX, 1957, pp. 6-7.

collapse of the Aśokan empire, when the pressure of the Indo-Bactrians was felt more and more in this region. If the Mauryan contact with the Greeks could bring such rich materials in Taxila, it is difficult to understand why similar materials are not found in the Mauryan level in their own capital city of Pāṭaliputra or other important cities of the Ganges Valley. Probably a spatial excavation in these cities may throw further light on the problem. But if the evidence of Maheshwar is to be relied, the coin stratigraphy speaks for a later date to be assigned to the debased silver currency and the cast coins, which were also the current issues in stratum II of the Bhir mound.

NUMISMATIC DATA IN THE ARTHAŚĀSTRA OF KAUṬALYA

PARMESHWARI LAL GUPTA

The importance of the *Arthaśāstra* of Kauṭalya as a valuable source of ancient Indian numismatics has for long been realised, and pioneers have now and then used its passages in their valuable contributions. But the entire material of the book has not yet been fully utilised. More than thirty years back A. Master tried to discuss the numismatic material of the *Arthaśāstra*, but he confined himself to only a few terms and dealt with them very briefly.[1] After him, only recently D. C. Sircar reverted to the subject and discussed some other points.[2] Still, the subject as a whole, is worth investigating and I propose to deal with it in this paper.[3]

Some General Terms

Lakshaṇādhyaksha. The chapter *Samāhartṛi-samudaya-prasthāpanam* (Bk. II, Chap. VI) deals with the duties of *Samāhartā* i. e. Collector-General, who was incharge of the various heads of the revenue; one of these heads was known as *durga*, under which, of the various sources mentioned there, one is *lakshaṇādhyaksha*.[4] The *lakshṇādhyaksha* was the Suprintendent of Mint; this is borne out by the duties prescribed for him in Chap. XII of the same book, entitled *ākarakarmānta-pravartanam*. Here his duties are laid down thus:

लक्षणाध्यक्ष: चतुर्भाग ताम्रं रूप्यरूपं तीक्ष्णत्रपुसीसांजनानामन्यतमं माषबीजयुक्तम् कारयेत् पणम्, अर्धपणम् पादमष्टभागमिति । पादाजीवं ताम्ररूपम् माषकमर्धमाषकम् काकणीमर्धकाकणीमिति ।[5]

This shows that the duty of the Superintendent of the Mint was to manufacture silver and copper coins of certain denominations. Silver coins were made of alloy in a given

1. *Num. Supl.*, XL, p. 9-12.
2. *JNSI*, XIV, p. 128-123.
3. The text edited by T. Ganapati Sastri is used for this study; and it is referred to as Text. Shamasastry's translation (fourth edition), where used, is mentioned as Translation.
4. शुल्कं दण्डः पौतवं नागरिको लक्षणाध्यक्षो·······द्वारबाहिरिकादेयं च दुर्गम् । Book II, Chap. VI, Text, I, 136.
5. Text. I. p. 205.

proportion. This officer is not referred to any where else. It appears that his duty ended with the manufacture of the coins.

Lakshaṇa. Since term *lakshaṇa* is used in the designation *lakshaṇādhyaksha*, mentioned above, it has been interpreted by Shamasastry as meaning 'coin'. The passage—आवेशनिभिः सुवर्णपुद्गललक्षणप्रयोगेषु तत्तज्जानीयात्[1] has been translated by him as 'The State Goldsmith shall gather from the artisans employed in the mint information concerning pure gold, metallic mass (*pudgala*) coins (*lakshaṇa*) and the rate of exchange (*prayoga*)'.[2]

The passage relates to the duties of the State Goldsmith and there is no reference to mint in the entire chapter, yet Shamasastry takes *lakshaṇa* as 'coins'. In another passage in the same chapter, the word *pudgala-lakshaṇa* is used in the same manner as in the above passage,[3] but curiously enough, there it has been taken by Shamasastry as a compound word meaning 'formation.'[4]

The implication of the said passage may be understood better with reference to the technique of testing gold etc. by the goldsmiths. When a mass of gold is given to a goldsmith for making any object, it is customary that he takes out a small piece of the mass of the gold as sample, which is known as *chāśanī* (sample) in the vocabulary of the goldsmiths in northern India. When the goldsmith brings the object, its gold is compared with the *chāśanī* to see if it was made of the same mass of gold that was originally given to him. This process seems to have been followed in the days of Kauṭalya also; he instructs the State Goldsmith to do the same with his artisans. Here *lakshaṇa* is the same as modern *chāśanī*. He says that information should be gathered concerning *pudgala* (the mass of gold given for manufacture), *lakshaṇa* (sample of the gold-mass,) and *prayoga* (utilisation i. e. the object prepared out of it). *Lakshaṇa*, used in the designation *Lakshaṇādhyaksha* simply means 'symbol' as we shall see a little later.

Rūpa. In the passage relating to the duties of the *lakshaṇādhyaksha*, quoted above, the silver and copper coins are called *rūpya-rūpa* and *tāmra-rūpa* respectively. Since *rūpya* and *tāmra*, undoubtedly, meant silver and copper

1. Bk. II, Chap. XIV, Text, I, 221.
2. Trans., p. 94.
3. वज्रमणिमुक्ताप्रवालरूपाणां जातिरूपवर्णप्रमाणपुद्गललक्षणान्युपलभेत ।
Text, I, p. 220
4. Trans. p. 97.

respectively,[1] we can take the term *rūpa* for 'coin'. This word *rūpa* for coin and the word *lakshaṇa* attached to the word *adhyaksha* in the designation *lakshaṇādhyaksha* for the Suprintendent of Mint, suggest that the coins had some symbols (*lakshaṇa*) or figures (*rūpa*) on them.

While describing the suppression of the wicked, Kauṭalya in a passage refers to *kūṭa-rūpa-kāraka*[2]—a person who often purchased various kinds of metals (*loha*), alkalis (*kshāra*), charcoal (*aṅgāra*), bellow (*bhastra*), clipper (*saṅdaṅśa*), hammer (*mushṭika*), anvil (*adhikaraṇī*), dies with designs (*bimba-ṭanka*) and crusibles (*mūsha*). Obviously all these objects were needed for the manufacture of coins. As such the term *kūṭa-rūpa-kāraka* meant the manufacturer of false or counterfeit coins. This also shows that *rūpa* meant coin and the coins had symbols (*bimba*) on them.

In this context, the story of Upālī's parents choosing a career for him in the *Mahāvagga* may be quoted here. His mother says that if Upālī studies *rupa*, his eyes will suffer.[3] Buddhaghosha's commentary says in this respect that he who learns the *rūpa-sutta*, must turn over and over many *kārshāpaṇas* and look at them. This also makes it clear that *rūpa* meant 'coin'.

Pāṇini also informs us that the coins were called *rūpa*; and we know from him that they were *āhata* (stamped or punched).[4] Explaining the word *āhata*, the *Kāśikā* tells us that *Dīnāra* and such other coins (*rūpa*) which were manufactured by hammering at the anvil were called *āhata*.[5] When the *Kāśikā* calls *Dīnāra* as *āhata*, it is correct, as the die-struck and the punch-marked coins were both, manufactured by the same process, *viz.* dies and punches were hammered on the flan of the metal by placing it on the anvil, either once or successively. Since the punch-marked coins had ceased to be current in his days and the gold *Dīnāras* of the Kushāṇas and the Guptas had come in vogue, the commentator naturally referred to *Dīnāras* as an example of *āhata-rūpa*. In the days of Paṇini and Kauṭalya single

1. The identification of silver and copper ore is given in Bk. II, Chap. XII (Text, I, p. 201 and 203) and there they are called *rūpya-dhatu* and *tāmra-dhātu*. The qualities of silver are also described in detail in Bk. II, Chap. XIII (Text, I, p. 211) and there too, it is called *rupya*.

2. यं वा नाना लोहक्षाराणाम् अंगारभस्त्रासंदंशमुष्टिकाधिकरणीबिम्बटंकमूषाणामभीक्ष्णं क्रेतारं मषीभस्मधूमदिग्धहस्तवस्त्रलिंगं कर्मारोपकरणसंसर्गं कूटरूपकारकं मन्येत्.... । प्रज्ञातः कूटरूपकारक इति प्रवासयेत । Book IV, Chap. IV, Text, II, p. 137.

3. SBE, XIII. 201ff.

4. रूपादाहतप्रशंसयोर्यप् । 5. 2. 120.

5. निघातिका ताडनादिना दीनारादिषु रूपं यदुत्पाद्यते तदाहतमित्युच्यते ।

die-struck coins were not known; so, they have called the coins of their own days as *rūpa* and *āhata*; and as such both meant the punch-marked coins by these terms, which were then widely current.

But it would not be correct to assume that wherever the word *rūpa* is used in the *Arthaśāstra*, it denoted 'coin'. Unfortunately Shamasastry had this assumption in his translation. For instance, the passage पशु विक्रेता पादिकं रूपम् दद्यात् (Bk. II, Chap. XXIX, Text I, 316) is translated as 'He who sells his cow, shall pay one fourth *rūpa* (value of the cow) (Trans. p. 114). It appears that Shamasastry meant to suggest that here *rūpa* meant value. But the passage is quite simple and meant that the cattle-seller shall pay one *pāda* (one quarter-*paṇa*) per cattle (*rūpa*.[1].

In the passage घनसुषिरे वा रूपे सुवर्णमृन्मालुकाहिंगुलुककल्को वा तप्तोऽवतिष्ठते। दृढवास्तुके वा रूपे वालुकामिश्रजतुगान्धारपंको वा तप्तोऽवतिष्ठते।...... सपरिभाण्डे वा रूपे लवणमुल्कया कटुशर्करया तप्तमवतिष्ठते। (Bk. II, Chap. XIV, Text, I, p. 225-26) we have three similar phrases:

घनसुषिरे वा रूपे
दृढवास्तुके वा रूपे
सपरिभाण्डे वा रूपे

Of these phrases, the first two have been translated by Shamasastry as 'compact and hollow pieces' and 'compact pieces' and the third as 'an ornament or a coin'.[2] If any of these translations carry the exact meaning of the phrases, is a matter which need not be considered here; but it is clear that the word *rūpa* in all the three phrases referred to one and the same object and that was certainly not 'coin'.

Similarly, the passages (i) तस्माद् वज्रमणिमुक्ताप्रवालरूपाणां जातिरूपवर्णप्रमाणपुद्गललक्षणान्युपलभेत। (Bk. II, Chap.XIV, TextI, p. 26) and (ii) तस्माद् वज्रमणिमुक्ताप्रवालरूपाणामपनेयिमानं च रूप्यसुवर्णभाण्डबन्धप्रमाणानि चेति। (Bk. II, Chap. XIII, Text, I, p. 218) are translated (i) "Hence (the state goldsmith) shall have a thorough knowledge of the species, characteristics, colour, weight and formation (*pudgalalakshaṇa*) of diamonds, precious stones (*maṇi*), pearls, corals and coins (*rūpa*)." (Trans. p. 97). (ii) "Hence the various counterweights (*araneyimāna*) used in weighing diamonds, rubies, pearls, corals, and coins (*rūpa*) as well as proportional amount of gold and silver necessary for various kinds of ornaments can well be understood." (Trans. p. 93). But it is

1. [This is incorrect. *Rūpa* in the sense of cattle is hard to find in Sanskrit literature. This meaning is only of lexicon interest. *Rūpa* must mean a 'coin' in the general sense and it goes with *pādikam*. *Pādikam rūpam* seems to be an expression as *chavanni paisā* in Hindi. (A.K.N.)]
2. Trans., p. 97.

quite apparent that there are no occasions for referring to coins in these passages. Here the word *rūpa* seems to have been simply used like 'etc.' in the sense of 'or the like' or 'similar species'.[1]

Silver Coins

Rūpya-Rūpa. The passage dealing with the duties of the Suprintendent of Mint, quoted above, informs us that silver coins (*rūpya-rūpa*) were made of an alloy containing 1/4th part of copper, and 1 *māsha* seed of either of the metals—*tīkshṇa, trapu, sīsa* and *añjana*. This shows that the silver coins contained silver less than 75%. The punch-marked coins, attributed to the Mauryan period are known to contain 79 to 68.8% of silver and 20 to 25% of copper with base metals like lead, iron, tin and gelena.[2] These figures are approximately the same as that of Kauṭalya, if we give some allowance to the impurity in the ore.

The silver coins of four denominations, viz. *Paṇa, ardha-paṇa, pāda* and *ashṭa-bhāga* were manufactured in the state mint, according to the passage mentioned above. Pāṇini mentions the coins only of the first three denominations. In the *Jātakas* we have the names of the coins *Kahāpaṇa* (*Kārshāpaṇa*), *aḍḍha* (*ardha-Kārshāpaṇa*) and *pāda* along with the names of a few other coins

Paṇa. *Paṇa* is frequently mentioned by Kauṭalya in the *Arthaśāstra*, while prescribing fines, pay, rewards and taxes.[3] It is also called *Paṇika*.[4]

Ardha-paṇa,. *Ardha-paṇa* was the half of the *paṇa* coin. It was also called *ardha-paṇika*.[5] Of this coin only a few references are found in the *Arthaśāstra*.[6]

Pāda. *Pāda* was the quarter of *paṇa* coin. It was also called *pādika*.[7] It appears that it was a popular coin amongst the coins of smaller denominations. It is mentioned independently[8] as well as with other figures[9] At places, where *half-paṇa* was intended, the term *dvi-pāda* i. e. *two pāda*

1. [This interpretation seems very arbitrary. (A. K. N.)]
2. *Num.Supl.* LXV, p 59.
3. Text, I, 112, 117, 134, 150, 222, 261, 278, 298, 300, 302, 303, 305, 309. 327, 341, 354, 355 ; II, 7, 8, 19, 21, 22, 23, 25, 26, 47, 49, 52, 53, 57, 58, 59. 60, 62, 64, 65, 69, 73, 74, 80, 83, 84, 86, 87, 88, 91, 92, 96, 100, 101, 103, 104, 105, 106, 107, 108, 109, 111, 113, 118, 119, 120, 121, 122, 124, 125, 126, 127, 130, 131, 132, 158, 159, 160, 162, 164, 172, 173, 174, 181, 204 ; III, 80.
4. Text, I, 271, 274, 289, 312, 315 ; II. 22, 96.
5. Text, I, 274; II, 59.
6. Text, I, 303 ; II. 119.
7. Text, I. 274, 316 ; II. 60, 96.
8. Text, I. 353, 354 ; II. 119, 158, 159.
9. *Sapāda-paṇa* (Text, I. 261, 302, 355 ; II, 64) ; *Sapādapaṇika* (Text. I. 271) ; *Sapāda-chatushpaṇa* (Text, I, 117, 303) ; *Sapāda-saptaviṁśati-paṇa* (Text, I, 261) *Sapāda-pañchāśapaṇa* (Text, I. 303).

(quarters) in used.[1] Like-wise we have *tri-pāda* for three-quarters of *paṇa*.[2] We find mention of *ardha-pādika* also.[3]

Ashṭa-bhāga. *Ashṭa-bhāga* or one-eighth *paṇa* is mentioned only thrice in the *Arthaśāstra*.[4] It is referred at another place as *ardha-pādika*.[5] No other reference of this coin is known in the *Arthaśāstra*, but where ever the word *dvi-māshaka* has occured in the Text, Shamasastry has translated it as 1/8th *paṇa*.[6] Similarly, he has translated the word *ashṭāṅśa* as meaning one-eighth *paṇa*,[7] whereas it has nothing to do with the coin and means simply one-eighth part.

Shodashabhāgika. *Sodashabhāgika* is not mentioned in the list of the coins, referred to above. But its use in the text[8] suggests that there was some coin of this name; but whether it was a silver or copper coin, it cannot be suggested.

Copper Coins

Tāmra-rūpa. About *tāmra-rūpa* i.e. copper coins, thus is said in the relevant passage पादाजीवं ताम्ररूपम् माषकमर्धमाषकम् काकणीमर्धकाकणीमिति (Book II, Chap. XII).[9] Here the phrase *pādājivaṁ* is translated by Shamasastry as meaning 'made of four parts of alloy'. A commentary has also been quoted by him to suggest that the copper coins also were made of alloy containing four parts of silver, eleven parts of copper and one part of *tikshṇa* or any other metal.[10] But *pādājivaṁ* indicates no such thing; it simply conveys that the coins lower than the denomination of *pāda* were of copper; i. e. *ashṭa-bhāga* coins was also made of copper and besides it copper coins were of four other denominations: *Māshaka*, *ardha-Māshaka*, *Kākaṇi* and *ardha-Kākaṇi*.

Mashaka. The *Māshaka* coins are known to the *Jātakas* where *Māsaka* and *addha-Māsaka* are named along with the names *chattāro-Māsaka*, *tayo-Masaka* and *dve-Māsaka*, which were also, in all probablity, coins. The *Māshaka* coin is referred to in the *Arthaśāstra* at five places; at four places it is called *Māshaka*[11] and *Māshika* at the fifth.[12] At two places

1. Text, II, 158, 159.
2. Text, II. 158, 159.
3. Text, II, 60.
4. Text, I, 352, 354; II. 120.
5. Text, II. 60
6. Trans. p. 229.
7. Trans. p. 169.
8. Text. II, 60
9. Text. I, 206.
10. Trans. p. 87, f. n. 2.
11. Text. I. 261, 310, 341; II, 119.
12. Text. I. 274.

the word *Māsha* is used in the sense of coin-denomination.[1] Pāṇini has also mentioned *Masha* as coin.[2] *Masha* and *Māshaka*, both in all probability meant one and the same coin.

Ardha-Māshaka. The coins *ardha-Māshaka* and *ardha-Kākaṇi*, which are mentioned in the *Arthaśāstra*, as being manufactured in the state mint, are not referred to any where else in the text.

Kakaṇī. The coin *Kākaṇi* was one-fourth of the *Mashaka* coin. It is mentioned thrice in the *Arthaśāstra*: (i) It is prescribed as the fee of the Superintendent of Weights, to be paid by traders;[3] (ii) mentioned as the wage of the manufacturer of the objects from one *pala* of lead;[4] (iii) described as the hire of the gambling-die.[5] Since gambling-dies were hired for a *Kakaṇī*, they were called *kākaṇyaksha*; and this name appears twice in the book.[6] *Kākaṇi*, besides being coin, is also mentioned as weight for weighing gold on three occasions.[7] These passages show that it was also undoubtedly the name of a weight; but how it was related to the other weights of gold is no where mentioned either in the *Arthaśāstra* or any where else.

Metrology of the Paṇa Series

While we know that *ardha-Paṇa* was half, *Pāda* a quarter, *ashta-bhāga* one-eighth of the silver *Paṇa* and similarly *ardha-Māshaka* was half, *Kākaṇī* a quarter and *ardha-Kakaṇi* one-eighth of the copper *Māshaka*, no where in the *Arthaśāstra* is an explicit mention to the relations between the coins of the two metals.

Our scholars, relying on a passage of the *Manu-Smṛiti*,[8] believe that *Kārshāpaṇa*, which was the same as *Paṇa*, was equal to 16 *Māshakas* of two *Rattis* weight. But the said passage of the *Manu-Smṛiti* does not mention either of the two names *Kārshāpaṇa* and *Paṇa*; instead it refers to *Dharaṇa* and *Purāṇa*. If *Paṇa* or *Kārshāpaṇa* was the same as *Dharaṇa*, as we are made to believe, then the *Paṇa* of the *Arthaśāstra* should be identified with the *Dharaṇa* mentioned in that book in the context of the silver weights and not with the *Dharaṇa* of Manu.

1. Text. II. 119, 158.
2. *Ashtādhyāyi*, V. 1. 34.
3. Text. I, 261
4. Text I. 121
5. Text. II. 112.
6. Text. II: 112, 165.
7. Text. I, 216, 217, 221.
8. द्वे कृष्णले समधृते विज्ञेयो रौप्यमाषकः ।
ते षोडश स्याद्धरणं पुराणश्चैव राजतः । VIII, 135–36.

If the passage of Manu refers to the metrology of coins, it can only be true to the coins that were current in his time and not of that existed earlier in the times of the *Artha-śāstra*. The suggestion of our scholars in this respect, is just like suggesting the value of the Mughal *rūpiyā* in the terms of modern *paisā*. While today 64 *paisā* or 100 *nayā paisā* make one *rūpiyā*, only forty of them made a *rupiyā* in Mughal times. Though both the terms *rupiyā* and *paisā* were used for the current coins in the Mughal period as we do now, yet their value were not the same as ours. The value of the coins changed from time to time, though the names and denominations remained the same.

The *Dharaṇa* of the *Arthaśāstra*, no doubt, was of 16 *Māshakas*, just like that of the *Manu-Smṛiti*, but the weights of the *Māshaka* were different. According to Manu, different *Māshaka* weights were used for silver and gold; the *Māshaka* weight for silver was of two *rattis* and for the gold of five *rattīs*. In the *Arthaśāstra* too, the weights of *Māshaka* for gold and silver are mentioned separtely, yet they were not so different as were in the times of the *Manu-Smṛiti*. The *Māshaka* weight for the gold in the time of the *Arthaśāstra* was of 10 *māsha* seeds or 5 *guñjā* seeds and for silver it was of 88 *gaura-sarsapa* (i. e. white mustered seeds). We are informed by Manu that 18 *gaura-sarsapa* (white mustered seeds) were equal to one *kṛishṇala* (i.e. *guñjā* or *raktikā* or *rattī*). Since *gaura sarsapa* and *kṛishṇala* or *ratti* both are natural seeds, they would have approximately the same weight in all the periods and for all the objects to be weighed, whether they may be of silver or gold. As such the weight of silvar *Māshaka* of the *Arthaśāstra*, in the terms of the *rattis* would only be two mustered seeds less than five *rattīs*, the waight of the *Mashaka* for gold. This shows that the *Māshaka* weight for the silver was of about five *rattīs* in the time of the *Arthaśāstra*. So, if the *paṇa* was the same as silver *dharaṇa*, then it weighed 80 (5x16) *rattīs* and not 32 *rattīs* as described in the *Manusmṛiti*. D. C. Sircar has rightly realised the fact that *Dharaṇa* of Kauṭalya was of 80 *rattīs*; but being obsessed by the current views that *Dharaṇa* was the same as *Paṇa*, for which there is not the slightest evidence, he suggested that 'owing to some confusion *Paṇa* is represented as silver coin and it was really a copper coin of that name weighing 80 *rattīs*'.[1] But no copper coin of this weight is known, which could be attributed to Mauryan period; while we have a large number of silver punch-marked coins of that period, which suggest that silver was the currency of the period and Kauṭalya had no confusion when he referred to *paṇa* as silver

1. *JNSI*, XIV, p. 128-30.

coin. Confusion is in our own minds that we attempt to identify silver *Paṇa* with *Dharaṇa*, without the least evidence in that respect and ignoring the fact that *Māshaka* was a copper coin, according to the *Arthaśāstra*, and had no counterpart in silver.

The value of *Paṇa* in the terms of *Māshakas* is no where explicitly mentioned in the *Arthaśāstra*. But there is a passage which by the implications of its meaning shows that *Paṇa* constituted of 32 *mashakas* or *mashikas*.

In a passage,[1] Kauṭalya prescribes the rate of ferry toll as follows :

A small quadruped (*kshudra-paśu*) or man carrying some load (*sabhāra-manushya*)	1 *Mashaka*
A head load (*śiro-bhāra*), load carried on shoulder, (*kāya-bhāra*), cow and horse	2 *Māshakas*
Camels and buffalo	4 *Māshakas*
A small cart (*laghu-yāna*)	5 *Māshakas*
Bullock-cart (*go-liṅgam*)	6 *Māshakas*
Big cart (*śakata*)	7 *Māshakas*
Load of merchandise (*paṇya-bhāra*)	1 *Pāda*

Here the objects on which the levy of ferry toll is prescribed, are described in the ascending order; accordingly, the toll increases from one to seven *Māshakas* and the latter is followed by the term one *Pāda*. A natural conclusion that may be adduced from the passage, would be that *Pāda* was a higher value than seven *Māshakas* and was atleast of the value of eight *Māshakas*. If our interpretation is correct, then *Pāda*. i.e. one-fourth *Paṇa*, being of eight *Māshakas*, a *Paṇa* would be of 32 *Māshakas*.

This interpretation goes against the generally accepted view that a *Paṇa* was of 16 *Māshaka*. In a personal discussion V.S. Agrawala expressed the opinion that we have misunderstood the passage of the *Arthaśāstra*. He interprets the term *paṇya-bhāra*, used in the above passage, as meaning 'goods for sale, weighing one *bhāra*' and the term *kāya-bhāra* as meaning 'goods weighing one *bhāra*, carried by a man for his personal use'. And then he suggests that the toll of one *Pāda* on the mercantile goods was double of the toll, levied

1. क्षुद्रपशुर्मनुष्यश्च सभारो मापकं दद्यात् । शिरोभारः कायभारो गवाश्वं च द्वौ । उष्ट्रमहिषं चतुरः । पंच लघुयानं । षड् गोलिंगम् । सप्त शकटम् । पण्यभारः पादम् । Book II, Chapt. XXVIII, Text, I, p. 310.

on the goods meant for personal use, i.e. two *Māshakas*. Thus he takes *Pāda* to mean four *Māshakas*. As regards the term *bhāra* he says that it was a weight equal to two and half maunds and *Sakaṭa* weight was ten times of a *bhāra* i.e. equal to 20 maunds and was also known as *mahābhāra*.

But to us, V.S. Agrawala's interpretation of the passage seems to be far fetched and is based on mere assumptions and has no testimony of facts. The basic fact has been ignored that Kauṭalya had his own way of expression. Whenever he meant to say of any tax etc., which was levied double of what he had prescribed earlier, he always referred to it then and there by simply adding a few words meaning' double on such and such items.[1] He never carried any item forward to mention separately at the end. The suggestion of V. S. Agrawala would place the passage on the foot of an exception, which is unexplainable and for which there seems no reason. Had Kauṭalya meant to say that ferry toll on *paṇya-bhāra* was to be levied double the toll of the *kāya-bhāra*, as V.S. Agrawala suggests, he would have either said it immediately after referring the toll on *kāya-bhāra*, or would have simply added the name of *paṇya-bhāra* along with camel and buffalo, on which he prescribed the toll at 4 *Māshakas*, the value, which V. S. Agrawala attaches to *Pāda*. Again, no where else than the present passage, the term 'four *Māshakas*' is used by Kauṭalya in the entire *Arthaśāstra*, while the term *Pāda* is used by him frequently. Had 'four *Māshakas*' been equal to a *Pāda*, he would not have failed to use the term *Pāda* here also, while listing the toll for camel and buffalo. The use of the two terms—four *Māshakas* and one *Pāda* for the same value in one and the same passage is rather curious. But, if they exist, they only mean two different values.

V. S. Agrawala's interpretation of *bhāra* also does not fit properly in the context of the passage. It is true that *bhāra* was the name of a unit of weight; and it was equal to 20 *tulās*, according to the *Arthaśāstra* itself.[2] But unfortunately, the weight of *tulā* is not mentioned in it anywhere. However, in his commentary Ganapati Sastri has said it to be of 100 *palas*.[3] If we rely on the commentary, then the

1. For instance, मत्स्यपक्षिणां वन्यवधहिंसायां पादोन·सप्तविंशतिपणमत्ययं कुर्यात्, मृगपशूनां द्विगुणम् । Book II, Chapt. 26. Text I. p. 298.

2. Book II. Chapt. 19, Text. I, p. 258 ; Trans. p. 114.

3. Ibid.

bhāra weighed more than 5 maunds (actually 203.125 seers)[1] and not 2½ maunds.[2] A weight of five maunds can hardly be carried by a man either in his hands or on his back or head; and such a heavy weight cannot be said *manushya-bhāra*, *śiro-bhāra* or *kāya-bhāra*.

Even if, without going into the details of the actual weight of *bhāra*, we accept that in the terms *manushya-bhāra*, *śiro-bhāra* and *kāya-bhāra*, the use of the word *bhāra* indicated some fixed weight; it is difficult to understand as to how did it make any difference for levying the toll, if a man carried the same weight either on his head or back or held it in his hands. By common knowledge, we know that a man can carry much more load on his head or back than what he can carry in his both hands. So, a load on the head or back would always be much more in weight than what could be carried in hands. Kauṭalya was aware of this fact and that explains why he has prescribed two different rates of toll for the loads carried in hands and carried on head or back. If this simple and natural fact is admitted, it would be clear that in the passage *bhāra* did not denote any fixed weight in the words *manushya-bhāra*, *śiro bhāra* and *kāya-bhāra*. It simply meant 'load'. The words *manushya-bhara*, *śiro-bhāra* and *kāya-bhāra* represented the loads of different weights that a man could carry under different methods. If it was so, there is no reason to suggest that *paṇya-bhāra* weighed the same as *manushya-bhāra* or *kāya-bhāra*. It may itself be a quite independent unit of load.

By pointing out that *śakaṭa* was ten times in weight than a *bhāra*, V. S. Agrawala probably meant to stress that the toll levied on *paṇya-bhāra* was not in order of ascension and the value of *pāda* was not more than seven *Māshakas*. But we should not ignore the fact that the *Arthaśāstra* of Kauṭalya was a code for a well organised administration, based on a properly organised revenue system. In a well organised revenue system, the levy of all kinds of taxes are always based on some definite principles. According to the well reasoned principle, the toll or cess or any other tax on a *śakaṭa*, if based on weight, would be ten times than that on a *bhāra*. And if

1. The weight of a *bhāra* would be 20(*tulas*) X100 (*palas*) X10 (*dharaṇas*) X80 (*rattis*) = 1600000 *rattis* and the weight of modern seer is 80 (*Tolas*) X 12 (*māshas*) X 8 (*rattis*) = 7680 rattis. Therefore a *bhara* is equal to 1600000 ÷ 7680 = 203.125 seers = 5 maunds 3.125 seers

2. The weight of a *bhara* would be 2 maunds 33.3333 seers if we take that the weight of *Dharaṇa* was 32 *rattis*, as mentioned in Manu. It seems that V. S. Agrawala relies on him for his calculation. But it is not valid here. *Dharaṇa* in the time of Kauṭalya was of 16 *Māshakas* of 5 *rattis*, i.e. 80 *rattis*. *Dharaṇa* weight of Kauṭalya is discussed earlier in this paper. *Ante*, p. 20.

the term *bhāra*, used in the words mentioned in the passage under discussion, represented one and the same weight, the toll on a *śakaṭa* would be one of the following: (i) 10 *Māshakas* if it was to be levied at the rate of *manushya-bhāra*; (ii) 20 *Māshakas* if levied at the rate of *kāya-bhāra*; and (iii) 40 *Māshakas* if levied at the rate of *paṇya-bhāra* (if *Pāda* is calculated at 4 *Māshakas*). But we find that the toll on a *śakaṭa* mentioned in the *Arthaśastra* was based on none of these rates. It was much less than any of these amounts. This shows that in the levy of the toll, *śakaṭa* was in no way related to *bhāra*. If it was so, there is no evidence to show that *paṇya-bhāra* was lighter than *śakaṭa*; and thereby we have hardly any evidence in the passage to suggest that a *pāda* was less than 7 *Māshakas* in value.

The *Paṇya-bhāra* was not the same in weight as *manushya bhāra* or *śiro-bhāra* and *kāya-bhāra* and that *Pāda* was not double of 2 *Māshakas* would be explicitly clear if we draw our attention to another passage of the *Arthaśāstra*, where the road cess is prescribed. Here it is said that the officer-in-charge of the boundaries (*antapāla*) shall receive road-cess (*vartanī*) as follows :[1]

Load of merchandise (*paṇya-vahana*)	1¼ *paṇa*
Single-hoofed animals (*khara*)	1 *paṇa*
Animal (*paśu*)	½ *paṇa*
Small animals (*kshūdra-paśu*)	¼ *paṇa*
Man carrying load (*sabhāra*)	1 *māshika*

Here the road-cess is tabulated in a descending order. The highest cess is levied on *paṇya-vahana*, which is none the else than *paṇya-bhāra* of the passage quoted earlier. Similarly the lowest cess is levied on *sabhāra*, which is same as *sabhāra-manushya*. If both the tables are compared, one would find that the ferry toll and the road cess in the case of *sabhāra-manushya* is the same i. e. one *Māshaka*; but in the case of *paṇya vahana*, the road cess is 1¼ *paṇas*—five times that of the toll i. e. 1 *Pāda*. And again, this is many times more than the toll or cess levied on *manushya-bhāra*. In view of these facts, it is unimaginable that ferry toll on *paṇya-bhāra* would only have been double of the *manushya-bhāra* or *kāya-bhāra*.

These facts make much more definite that *Pāda* was not the double of 2 *Māshakas* i. e. 4 *Māshakas* and was decidedly of more than seven *Māshakas*. Thus we have every reason to believe that *Pāda* was of at least 8 *Mashakas* and *Paṇa* of 32

1. अन्तपालः सपादपणिकां वर्तनीं गृह्णीयात् पण्यहनस्य, पणिकामेकस्यखुरस्य, पशूनामर्धपणिकां क्षुद्रपशूनां पादिकाम्, अंसभारस्य माषिकाम्। Book II. Chapt. 21. Text I. p. 274

Māshakas in the days of Kauṭalya. This conclusion would, however, not affect our identification of the five symbolled Punch-marked coins as *Paṇa*.

An Obscure Coin Name

Besides the coins of *paṇa* series, which is so often mentioned in the *Arthaśāstra*, we have in a passage another term *kara* which seems to have been an unit of enumeration used in counting money or the name of a coin. While dealing with the replenishment of the treasury (Book V Chapter II), the leavy of the following demands is prescribed in the terms of *kara*.

From dealers in gold, silver. diamonds, precious stones, pearls, coral, horses and elephants	50 *karas*
From dealers in cotton threads, cloths, copper, brass, bronze, sandal, medicine and liquor	40 *karas*
From dealers in grains, *loha* (metal) and carts	30 *karas*
From *Kācha* (glass) dealers and artisans of fine workmanship	20 *karas*
Artisans of inferior workmanship and keepers of prostitutes	10 *karas*
Dealers in firewood, bamboos, stones, earthen pots, cooked foods, and vegitables	5 *karas*[1]

This apparently shows that *kara* was a monetary unit or a coin; Shamasastry suggests that it seems to mean 10 *paṇas*, but on what authority, it is not known. As far as we are aware, this term is not known elsewhere.

Gold Coinage

We have seen above that while describing the duties of the Suprintendent of Mint, Kauṭalya speaks of manufacturing of only silver and copper coins and does not say anything about the minting of the gold coins. The natural conclusion

1. सुवर्णरजतवज्रमणिमुक्ताप्रवालाश्वहस्तिपण्याः पञ्चाशत्कराः ।
सूत्र वस्त्र ताम्रवृन्तकंसगन्ध-भैषज्यशीधुपण्याश्चत्वारिंशत्कराः ।
धान्य रस लोहपण्याः शकटव्यवहरिणश्च त्रिंशत्कराः ।
काचव्यवहारिणो महाकारवश्च विंशतिकराः ।
क्षुद्रकारवो वन्धकीपोषकाश्च दशकराः ।
काष्ठवेणुपाषाणमृद्भाण्डपक्वान्न हरितपण्याः पंचकराः ।
Book V, Chap. 2, Text II, p. 194

would be that gold coins were not in currency and so they were not minted. As early as the *Rigveda*, a coin called *Nishka* is known. It is also referred to in the *Brāhmaṇas* and the *Jātakas*. In the later *Saṁhitās* and the *Brāhmaṇas*, we come across another coin *Śatamāna*. Both these coins are believed to be of gold generally. These terms are however, conspicuous by their absence in the *Arthaśāstra*. This also indicates that gold coins were not known in its period.

It is commonly believed that the names of the coins were also the names of the metal weights.[1] So, even in the absence of any clear indication of gold coins in the *Arthaśāstra*, the mention of *suvarṇa* as a weight, equal to one *karsha* or 80 *rattīs*[2] in that book, is taken to be suggestive of the existence of a gold coin of that name. In support, it is pointed out that this theoretical weight of *Suvarṇa* is confirmed by the *Suvarṇa* coins of the Gupta period. But it has been always overlooked that the early Gupta gold coins were never made on any indigenous weight standard They were struck on the weight standard of the Kushāṇa coins, which in turn were made on the pattern of Roman *denarius* and were called *Dīnāra*. *Dīnāra* and *Suvarṇa* are both used concurrently in an inscription of Kumāragupta I,[3] whose coins of the *suvarṇa* weight standard (80 rattis) are not known. Some of the coins of his successors undoubtedly touch the weight standard of the *suvarṇa* ; but this weight was not constant in their coinage. The weight of the coins of the later Guptas went on increasing from king to king.[4] So, it is difficult to say if at any stage their coinage were struck, keeping in view any indigenous weight standard. No doubt, we have the words like *dvi-suvarṇa* and *adhyārdha-suvarṇa* in the *Kāsikā*[5] which suggest the existence of the gold coins named *Suvarṇa* ; but this does not suggest that gold coins were current in the pre-Kushāṇa or pre-Gupta periods also. *Kāśikā*, might have called the *Dīnāras* of the Kushāṇas and the Guptas, which were current in its time, as *Suvarṇa*. As such we have no specific reference to the existence of the *Suvarṇa* coins immediately after the *Arthaśāstra*.

Anterior to Kauṭalya, in Pāṇini, also we do not have any reference of *Suvarṇa* as coin although he mentions *Nishka* and *Śatamāna* of the Brāhmaṇa literature and the *Kārashāpaṇa* and *Paṇa* coins of the *Jatakas* and the *Arthaśāstra*. However,

1. Bhandarker, *Carmichael Lectures*, p. 61.
2. Text, I. p. 2:6.
3. Fleet, *Corpus Insriptionum Indicarum*, Vol. III. No. 64.
4. *JNSI*, XIV, p. 113.
5. *Kaśikā* on V. I. 29 ; VI. 2. 55.

V. S. Agrawala thinks that this is implied in the *sūtras*—*Hiraṇyaparimāṇaṁ dhanam* (VI. 2.55) and *Jāturūpebhyaḥ parimāṇe* (IV. 3.153).[1] Pointing out to the references of *suvarṇa-hiraṇya* as *dakshiṇā* alternatively mentioned with *Śatamāna* in the *Śatapatha Brāhmaṇa* at two places, A.S. Alteker thought that in the Brāhmaṇa period *hiraṇya-suvarṇa* might have denoted a coin.[2] Thus it has sought that *suvarṇa* coin or a coin of gold, was current in the pre- and post-*Arthaśāstra* period and so it could be argued that it must have been current in the period of *Arthaśāstra* also.

Shamasastry's translation of the *Arthaśāstra*, would also give such an impression A. Master, however thought that gold coins are no where stated in the *Arthaśāstra*, and that gold made up into weight of a *suvarṇa* was stamped and used as currency.[3] According to D C. Sircar, was not in common gold coinage use, although there are references in the *Arthaśāstra* to the gold coins.[4]

In view of these theories let us examine what the *Arthaśāstra* itself has to say on this point. The word *suvarṇa* is mentioned at numerous places in the book ;[5] particularly in the chapters XIII and XIV of Book II, which deal with the activities of the two state officers—Superintendent of Gold (*Suvarṇādhyaksha*) and State Goldsmith (*Sauvarṇika*). In all these places the word *suvarṇa* meant pure and simple 'gold' as metal ; yet at places the word *suvarṇa* has been translated by Shamasastry to mean gold coins. In translating the chapter XIV, it appears that Shamasastry has altogether forgotten that he was translating the chapter which deals with the works of the State Goldsmith, who was entrusted with the manufacture of the objects of gold and silver and had nothing to do with the coins. He has translated the early portion of this chapter as if it dealt with the duties of the Mint Superintendent. So, the translation of this chapter should be used with caution.

We would refer here to only those passages, which are said to have the references of gold coins. The very first line of the chapter XIV सौवर्णिकः पौरजानपदानां रूप्यसुवर्णमावेशनिभिः कारयेत्[6] has been translated by Shamasastry as 'the State Goldsmith shall employ artisan to manufacture gold and silver coins

1. *JNSI*, XV, p. 28-29.
2. Ibid, p 16.
3. *Num.* Supll. XL, p. 11.
4. *JNSI*, XIV, 132.
5. Text. I. 137, 182, 209, 210, 212, 213, 214, 215, 216, 217, 221, 223, 224, 225, 226 ; II. 120, 317 ; III. 185.
6. Text, I, 220

from the bullion of the citizen and country people.[1] If this was the duty of the State Goldsmith, then what for was the Suprintendent of Mint ? No doubt *rūpya* is known to mean 'coin' and also 'silver' ; as such one may infer from the compound word *rūpya-suvarṇa* either meaning 'coin of gold' or 'silver and gold'. Since in the *Arthaśāstra,* the word *rūpa* is used for coin and *rūpya* is exclusively used for silver, as is evident from the many passages of the Text,[2] *rūpya-suvarṇa* would only mean here 'silver and gold' and nothing else. This phrase is used in this sense in no less than seven places in the book,[3] and is also in consonance with the subject matter of the chapter. Thus the passage simply means that the State Goldsmith shall get manufactured objects out of the gold and silver given by the people (*paura-jānapada*).

Next passage तप्तकलधौतकयोः काकणिकः सुवर्णे क्षयो देयः[4] is translated 'In getting a *suvarṇa* coin manufactured from gold or from silver one *kākaṇi* weight of metal more shall be given to the mint towards the loss of manufacture.'[5] On the very face the translation is absurd. It shows that *suvarṇa* coins were made of gold and silver both. But the passage has nothing to do with the manufacture of any kind of coin. It simply refers to the depreciation of metal allowed during the process of manufacture.

Next our attention goes to the passage from Chapter I of Book IV, which D. C. Sircar has quoted in his paper to point out the allusion of the gold coin. Here the author dealing with the foul activities of the artisans and their wages, refers to goldsmiths, who had nothing to do with the minting of the coinage. He says about them—सुवर्णान्माषकमपहरतो द्विशतो दण्डः। रूप्यधरणान्माषकमपहरतो द्वादश पणः[6] । This has been translated by Shamasastry, 'when a goldsmith steals from a *suvarṇa,* gold equal to the weight of a *Māsha,* he shall be punished 200 *paṇas* ; when he steals from a silver *dharaṇa,* silver equal to the value of a *Māsha,* he shall be fined 12 *paṇas.*[7] Sircar puts it in a little different way. 'If a goldsmith steals in the process of making coins one *Māsha* from the gold coin, called *suvarṇa,* he will be fined 200 *paṇas,* while his fine will be 12 *paṇas* if he steals one *Māsha* from a silver

1. Trans. p, 94.
2. Text. 1, 199, 211. 215, 216, 221, 223, 224.
3. Text. I, 214, 218, 219, 226; II. 119, 198, 317.
4. Text 1, 221
5. Trans., p. 95
6. Text II, p. 120.
7. Trans., p. 229

Dharaṇa."[1] Here he finds the words *Suvarṇa* and *Dharaṇa* as used in the specific sense of coins of gold and silver. But unfortunately, the lines preceding and following the present ones have been ignored; otherwise such an unwarranted interpretation of the passage would never have been given.

The preceding lines to the above are—सुवर्णकाराणाम् । अशुचिहस्ताद् रूप्यं सुवर्णमनाख्याय सरूपं क्रीणतां द्वादशपणो दण्डः, विरूपं चतुर्विंशतिपणः, चोरहस्तादष्टचत्वारिंशत्पणः । प्रच्छन्न विरूप मूल्यहीनक्रयेषु स्तेयदण्डः । कृतभाण्डोपधौ च ।[2] i. e. Goldsmiths, who without giving information purchase from unclean hands silver or gold objects without changing their forms, shall be fined 12 *paṇas*; if they do the same changing the form, they shall be fined 24 *paṇas*; if they purchase from a thief, fine shall be 48 *paṇas*; if they purchase an article in secret, obliterated and underprice, they shall be given punishment prescribed for the theft; the same would be the punishment for deception in manufacture. And in the same vein follow the lines under reference and say that 'the goldsmiths who steal a *Māsha* out of one *suvarṇa* weight of gold will be punished 200 *paṇas* and 12 *paṇas* if he steals a *Masha* out of one *Dharaṇa* weight of silver." Thus there is no allusion to gold *suvarṇa* or silver *Dharaṇa* coins in those lines.

This would be further clear from the subsequent lines that follow the passage: माषको वेतनं रूप्यधरणस्य । सुवर्णस्याष्ट भागः । शिक्षाविशेषण द्विगुणा वेतनवृद्धिः ।.......ताम्रवृत्तकंसवैकृन्तकारकूटानां पंचकं शतम् वेतनम् ।[3] Here the wages for manufacturing gold and silver objects are prescribed as one *Māshaka* per *Dharaṇa* weight of silver and 1/8 *paṇa* for one *suvarṇa* weight of gold. Here word *Vetana* is used and it deserves our attention. It does not refer to any kind of seigniorage of the coinage; for just after this prescription follows the wages for manufacturing objects of copper, *vrintta, kaṁsa, vaikṛiṅtaka, ārkūta* and also the punishment for stealing them. Coins are not known as being made of these base metals in this period.

Lastly, in chapter IV of Book IV is the prescription of fine for counterfieting the coins (*Kūta-aūpa-karaṇa*) which is already referred to above. Just after it, is a line: तेन रागस्यापहर्ता कूटसुवर्णव्यवहारी च व्याख्यातः;[4] which is translated by Shamasastry as, 'similar steps may be taken against those who lower the quality of gold by mixing an alloy or deal

1. *JNSI*, XIV, 131.
2. Text. II, p. 119-20.
3. Ibid p. 120.
4. Text. II, 137.

with counterfeit gold (*suvarṇa*=coin ?)[1] But when once a punishment is laid down for counterfeiting the coins (*kūṭa-rūpa-karaṇa*), it was hardly necessary to repeat the same statement for counterfeiting the gold coins. Here *kūṭa-suvarṇa vyavahārī* simply means 'one who deals in false or adulterated gold.

Thus there is no passage in the *Arthaśāstra*, which can suggest even by implication or inference the existence of gold coins or a coin named *suvarṇa*, weighing one *suvarṇa* i. e. 80 rattis.

Here we would like to draw attention to another word *hiraṇya*, which is generally taken to be synonymous with *suvarṇa*, meaning gold. This word is used in the *Arthaśāstra* in no less than thirty-eight passages;[2] but surprisingly enough, it does not carry this meaning in any one of them, though at two places Shamasastry has translated it as 'gold coin'.[3] It is conspicuously absent in the two chapters, which deal particularly with gold (Chapters XIII and XIV of Book II). In Chapter XIII, Kauṭalya enumerates the varieties of gold, which include the names *Śatakumbha*, *Hāṭaka*, *Jātarūpa*[4] etc. which are known as synonymous to *suvarṇa*; but *hiraṇya* is not there. Even the Chapter which deals with the mining operations (Book II, Chapter XII) and mentions gold and gold ores, has no reference of *hiraṇya*. It is always used in the *Arthaśāstra* in the sense of wealth, money, cash and coin. In most of the passages, where it is used in the *Arthaśāstra*, Shamasastry has grasped the meaning of *hiraṇya* in its right sense and translated it as money, amount, revenue fees, wealth, wages, tribute and treasury. Though, some of these translations are not quite apt, yet they carry the sense of the word and suggest that the word *hiraṇya* does not mean gold. The other passages also, where Shamasastry has translated the word as gold, do not really mean 'gold', but carry the meaning of wealth, cash, money or coin. We need not refer to these passages, as one who takes care to go through the text of these passages, will immediately know about the real import of the word.

Hiraṇya meant money, cash or coin is also borne out from the passages of the *Manu-Smṛiti*.[5] *Hiraṇya* was a term

1. Trans., 239.
2. Text, I. 111, 134, 152, 292, 293, 297, 344, 346, II, 61, 101, 141, 175, 189, 192, 195, 196-97, 199, 199-200, 200, 205, 206, 227, 265, 295, 292, 295, 296, 313, 329; III. 25, 33, 67, 147, 148, 165, 176, 177, 194, 203.
3. Trans., p. 56, 288.
4. Text, I, 210.
5. *Manu-Smṛiti*, VIII, 99; 154-55.

for coin, is evident from the word *heraññika* (*Hairaṇyika*), used for him, who examined coins, in the *Visuddhimagga* in the oft-quoted passage, which describes how a lot of coins lying on the table would strike an inexperienced boy, a man from the village and a *Hairaṇyika* (coin-tester).[1] This word is generally translated as shroff or money-changer. The context shows that *Hairaṇyika* had to deal with coins.

Hiraṇya in the sense of coin, was known to the *Jātakas*. The *Babbu Jātaka* tells us of a merchant, who left behind a treasure of forty crores *hiraṇya*. His wife had a strong love for money. So, after her death, she was re-born a mouse and dwelt over the treasure. She fell in love with a stone-cutter, so much so indeed that she gave him at first one, but afterwards, two or three *kārshāpaṇas* every day till by degrees she gave him the whole hoard. Here the treasure is stated to consist of forty crores *hiraṇya*, which are afterwards referred to as *Kārshāpaṇa*, by giving of which the hoard was exhausted. *Kārshāpaṇa* having been used as synonym of *hiraṇya*, no doubt can be entertained as to *hiraṇya* being used here for coin or wealth and not for gold. *Kārshāpaṇa* of gold are not known. That Pāṇini also knew that *hiraṇya* meant wealth is quite clear from his *sūtra*—*hiraṇya parimāṇaṁ dhanam* (VI. 2. 55). *Hiraṇya*, meaning wealth or property is also given by Apte and Monier Williams in their *Dictionaries* (S. V.)

1. यथा हि हेरञ्ञिकफलके थपितं कहापणरासिम्
एको अजातबुद्धिदारको एको गामिकपुरिसो
एको हेरञ्ञिकोति तीसु जनेसु परसमानेसु
अजातबुद्धिदारको कहापणानं चित्रविचित्र
दीघ चतुरस्स परिमण्डल भावमत्तमेव जानाति ।
इदम् मनुस्सानम् उपभोगपरिभोगम् रतनसम्मतंति
न जानाति । गामिक पुरिसो चित्रविचित्रादि भावं
जानाति इदं मनुस्सानं उपभोग परिभोगं
रतनसम्मतंति च । अयं छेको अयं कूटो अयं
अड्ढसारोति इदं पन विभागं न जानाति
हेरञ्ञिको सब्बेपि ते पकारे जानाति
जानन्तो च कहापणम् ओलोकेत्वापि जानाति
अकोटितसद्दम् सुत्वापि गन्धम् घायित्वापि
रसं सायित्वापि हत्थेन धारयित्वापि अमुकस्मिं
नाम गामे वा निगमे वा नगरे वा पब्बते वा नदीतीरे
वा कतोति पि अमुकाचरियेन कतो ति पि जानाति ॥

Visuddhimagga, **Chap. XIV.**

Thus if any allusion of the existence of gold coin is possible, it is from this word *hiraṇya* and not from the word *suvarṇa*; but the use of the word, suggests that it was a generic name for wealth or coin and not of any particular kind of coin or coin of any particular metal. So, it would be incorrect to take the word *hiraṇya* meaning gold or gold coin, everywhere it occurs in any ancient text.

In several passages of the *Arthaśāstra*,[1] we have *Hiraṇya-suvarṇa* i. e. *hiraṇya* and *suvarṇa* both used together. They are translated by Shamasastry as 'bar gold' and 'coined gold' respectively, at one place[2] and 'gold' and 'gold coins' respectively at other.[3] This term in the form of *Suvarṇa-hiraṇya* is frequently found in the Buddhist literature.[4] In one of the passages of the *Jātaka*, it is translated by Cowell and Rouse as 'gold and coin'. Bhandarkar also suggested that *hiraṇya* meant gold and *suvarṇa* meant gold coins where they are associated together.[5] But we have just seen above that *suvarṇa* does not mean 'gold coin' or 'coin of gold' and *hiraṇya* does not carry the meaning of 'bullion gold'. They respectively simply mean 'gold' and 'coin'. As such it would be correct to say that *hiraṇya suvarṇa* was used in a general way to express wealth or money.

The *Bhuridatta Jātaka* gives the story of snake king tamed by a snake charmer, who amassed a fortune by making him assume various appearances and exhibit dancing. At the very first performance that he gave in a village, the people were so pleased that they heaped on him *hiraṇya-suvarṇa, vastra* and *alaṁkāra*. *Vastra* and *alaṁkāra* undoubtedly mean 'garments' and 'ornaments' and *hiraṇya-suvarṇa* meant nothing but money. A snake-charmer is not expected to be paid in gold and gold-coins by the villagers. Even today, in villages the snake charmers are given, like the days of the *Jātakas*, old garments etc. for their performances and are paid something trifling in cash.

The passages in the *Arthaśāstra*, having this term are following :

(i) प्रतिषिद्धयोः स्त्रीपुंसयोरन्योन्योपकारे क्षुद्रकद्रव्याणां द्वादशपणो दण्डः, स्थूलद्रव्याणां चतुर्विंशतिपणः, हिरण्यसुवर्णयोश्चतुष्पंचाशत्पणः स्त्रियाः। दण्डः पुंसो द्विगुणः।[6]

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1. Text., II, 23, 101, 109, 166, 198.
2. Trans. p. 274.
3. Ibid, 177, 217, 221, 225.
4. *Vinaya Pitaka*, I, 150; III. 16 48; *Digha Nikāya*, II, 179; *Majjhima Nikāya*, III, 1 5; *Jataka*, I, 341; VI, 69, 146.
5. *Charmichel Lectures*, p 51.
6. Book III, Chap. 3, Text, II, 23.

(ii) महापशुमनुष्यक्षेत्रगृहहिरण्यसुवर्णसूक्ष्मवस्त्रादीनां स्थूलकद्रव्याणां द्विशतावरः पंचशतपरः मध्यमः साहसदण्डः ।[1]

(iii) वस्त्राभरणहिरण्यसुवर्णभाण्डहिंसायां तच्च पूर्वश्च साहसदण्डः ।[2]

(iv) देवपशुप्रतिमामनुष्यक्षेत्रगृहहिरण्यसुवर्णरत्नसस्यापहारिण उत्तमो दण्डः शुद्धवधो वा ।[3]

(v) समाजे वा सर्वपण्यसन्दोहेन प्रभूतं हिरण्यसुवर्णमृणं गृह्णीयात्, प्रति भाण्ड मूल्यं च ।[4]

Of these the first four passages prescribe punishments in respect of certain offences. In the first passage, fine is prescribed for transaction between men and women of (i) *kshūdra-dravya* (small or ordinary things), (ii) *sthūla-dravya* (big or important things) and (iii) *hiraṇya-suvarṇa.* From another passage, we know that *Kshudra-dravya* meant flowers, fruits, vegetables, roots, turnips, cooked food, skin, bamboo, earthenware etc. and *sthūla-dravya* included iron (*kālāyasa*), wood, rope material, small quadrupeds, and cloths.[5] The natural conclusion, therefore would be that all other things of transaction, were included in the term *hiraṇya-suvarṇa* This is further clear from the second passage, which prescribes punishment for the seizure of big things like quadrupeds, men, field, houses, *hiraṇya-suvarṇa* and fine-cloth (*śūkshma-vastra*). This suggests that the term *hiraṇya-suvarṇa* meant 'valuable movable objects'.

The third passage is mentioned in the chapter dealing with assault (*daṇḍa-pārushya*). There, after prescribing punishments for the robbery of small and big things (*kshūdra* and *sthūla dravya*) Kauṭalya gives the present passage. Here he enumerates cloths, ornaments *hiraṇya-suvarṇa* and *bhāṇḍa* (utensils), as the objects of value, that can one rob during an assault. If one steals any thing from a house, we know, he can only take away the cloths, ornaments, cash and domestic utensils. As such, this also shows that *hiraṇya-suvarṇa* meant cash. The fouth passage is the same as the third one ; but it prescribes the punishment for taking away of the above objects by force (*apaharaṇa*). The fifth passage lays down the means of replenishment of the treasury ; and loan of *hiraṇya-suvarṇa* is suggested from the public societies (*samāja*) and commercial corporations (*paṇya-sandhoha*) ; and we know

1. Book III, Chap. 17, Text, II, 101.
2. Book III, Chap. 19, Text, II, 109.
3. Book IV, Chap. 10, Text, II, 166.
4. Book V, Chap. 2, Text, II, 198.

5. पुष्पफलशाकमूलकन्दपक्वान्नचर्मवेणुमृद्भाण्डादीनां क्षुद्रकद्रव्याणां ; कालायसकाष्ठ-रज्जु द्रव्यक्षुद्रपशुपटादीनां स्थूलकद्रव्याणां । Book III, Chap. [illegible] Text, II, p. 100.

such loans could only be in the form of cash ; therefore the term, in the passage refers to the same.

It is thus clear that *hiraṇya-suvarṇa* is a term meaning wealth in the nature of cash, in the similar way as we have the word *zar-jawāhar,* literally meaning 'gold and jewellary' for movable wealth or cash in Hindustani language. It did not exclusively mean the gold objects, as we have another term *ābharaṇa* (ornaments) specifically mentioned in the above passages. People in general do not have lump of gold in their homes. If they have gold, they have in the form of ornaments only.

In the light of these, it is necessary that these terms occuring in other texts, should be examined afresh before we could make out any hypothesis about the gold coinage in pre-Kushāṇa India.

Coin-Examiner and his Duties

In the *Arthaśāstra,* we have an officer *Rūpadarśaka,* besides the *Lakshaṇādhyaksha,* who was concerned with the coins and as the term implies, he was the examiner of the coins. He was probably attached to every state department for testing the coins.[1] It is stated amongst the duties of the *sannidhātā* i. e. treasurer that he should receive only such coin or money (*hiraṇya*), which is declared genuine (*viśuddha*) by the *Rūpadarśaka.* It is further laid down that the *Rūpadarśaka* should cut the bad (*aśuddha*) coins[2] *Rūpadarśaka* was to be punished if he declared an unacceptable coin to be worthy of currency or rejected an acceptable coin.[3] The duties of the *Rūpadarśaka,* as laid down elsewhere, was precisely to regulate the *paṇayātrā* (currency), *vyavahārika* (exchange) and *kośa-praveśa* (legal tender). He was also entrusted to charge the following state dues :

(i) eight percent as *rūpika* ;
(ii) five percent as *vyājī* ; and
(iii) 1/8 percent as *pārikshika.*[4]

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1. तस्मादस्याध्यक्षाः संख्यायकलेखकरूपदर्शकनीवीग्राहकोत्तराध्यक्षसखाः कर्माणि कुर्युः । Book II, Chap. 9, Text I, p. 164

2. रूपदर्शक विशुद्धं हिरण्यं प्रतिगृह्णीयाद्, अशुद्धम् छेदयेत् । Book II. Chapt. 5, Text. 1. p. 131

3. रूपदर्शकस्य स्थितां पणयात्रामकोप्यां कोपयतः कोप्यामकोपतो द्वादशपणो-दण्डः । Book IV, Chap. 9, Text, II, p. 121.

4. रूपदर्शकः पणयात्रां व्यवहारिकीं कोशप्रवेश्यां च स्थापयेत् । रूपिकमष्टकं शतं, पंचकं शतं व्याजीं, पारीक्षिकमष्टभागिकम् शतम् । Book II, Chap. 12, Text, I, p. 203

Of these, as the term indicates, *pārikshika* was probably the fee for testing the coins. Whether it was charged on the coins that were brought to *Rūpadarśaka,* merely for testing or whether it was charged for testing the coins, which were to be recieved in the state treasury for deposit as state dues, is not explicit. But in all probablity, it was charged in the first case. It does not appear that he used to put any test-mark on the coins after testing their genuineness, as we do not find any reference to that effect in the *Arthaśastra,* nor any trace of such marks on the Mauryan punch-marked coins. Some small symbols, which are suggested to be test marks, are noticed only on the pre-Mauryan coins. It appears that this practice was abandoned in the Mauryan period, if it was current earlier. The genuine coins after test were returned and the bad coins were withheld and cut down. As such there was no need of any test marks. It was just like the modern practice prevelant in the government treasuries and the banks. The *pārkhi* or *pārīkha,* tests the coins before accepting them; and if he notices any bad coin, he returns it after cutting.

As regards *rūpika,* A. Master had suggested that it was probably a discount consisting partly of a seigniorage for coins used at their metallic value and partly of compensation for depreciation.[1] But this suggestion seems to be only partly correct. *Rūpika* is referred to elsewhere also as an important source of state income[2] and it was not exclusive to the coinage but was also levied on the import of salt.[3] So, it does not seem to have any direct relation with the seigniorage. Had it been so, its collection would have been entrusted to the Suprintendent of the Mint (*Lakshaṇādhyaksha*) and not to the *Rūpadarśaka.*

It appears that, as in modern times, the issue of the coinage was a state monopoly and that minting was not free i. e. the bullion brought by the people to the mint was not converted into coins for them by stamping the coin-die of the mint and charging seigniorage, as was the case in the Mughal period. Had it been so, we would have expected explicit mention of such a practice, as we have in the case of the State Goldsmith, who was instructed to manufacture articles of gold and silver received from the people.[4] It appears that this *rūpika* was related with *Rūpadarśaka's* duty of regulating

1. *NS*, XL, p. 10
2. मूलं भागो व्याजी परिघः क्लृप्तं रूपिकमत्ययश्चायमुखम् । Bk. VI, Chap. 6, Text, I, p. 137,
3. Book II, Chapt. 14, Text I. p. 207-8
4. सौवर्णिकः पौरजानपदानां रूप्यसुवर्णमावेशनिभिः कारयेत् । . Book II, Chap. 14. Text I, 220.

the *paṇayātrā* (currency of the coins). It seems likely that the coins after minting were sent from the mint to this officer, and he arranged for their circulation. In all probablity, he charged on behalf of the state from the people 8 percent over the value of the metal. The procedure seems to have been that the people brought bullion to the *Rūpadarśaka*, who exchanged it for ready made coins and charged 8 percent as fee to meet the cost of manufacture etc. Thus it seems to be an indirect seigniorage. The seigniorage in the Mughal period was 5½ percent on the value of the metal.[1] As compared to it, the rate of 8 percent in the Mauryan period seems reasonable ; its being a bit high may be accounted for by the paucity of silver.

Like *Rūpika*, *vyaji* was also an important source of state income.[2] It appears from the passages विक्रये पण्यानामर्घवृद्धि रूपजा मानोन्मानविशेषो व्याजी क्रयसंघर्षे वा वृद्धिरित्यायः[3] and तुलामानन्तरं हस्तपूरणमुत्करो व्याजी पर्युषितं प्रार्जितं चोपस्थानमिति[4] that the *vyāji* was a compensatory amount that was paid to balance the gain or loss in transaction due to difference in weights and measures. Some other passages show that it was paid in cash or kind at various rates according to the form of objects sold or purchased.[5] But how the state was to be benefitted from *vyājī* is not clear from any of these passages. However, to the state did accrue the benifit of this levy on the sale and purchase of commodities, most of which were state controlled. An interesting thing about it is that it was levied on fines also[6] and an explanation is given to justify it.[7]

About the coins, it is said that only those coins could be used in currency (*paṇayātrā*) which were validated by *vyājī* (*vyajī pariśuddhā*).[8] This is followed by the prescription of fine of 12 *paṇas* for the use of *paṇa* coin, one *māshaka* less in weight.[9] This suggests that *vyājī* had something to do with the weight of the coins. It seems that the *paṇa* coins, which were worn during currency (*paṇayātrā*) and were reduced by a *māshaka* or more were invalid for further currency. Such coins were in all probablity returned to the *Rūpadarśaka* and

1. Hodivala, *Historical Studies in Mughal Numismatics*. 132.
2. Book II, Chapt. VI, Text, I, 137.
3. Book II, Chap. VI, Text I, p. 140.
4. Book II, Chapt. 15, Text I, p. 232.
5. Book II, Chapt. 16, Text I, p. 242 ; Book II, Chapt. 19, Text I, p. 262.
6. Book III, Chapt. 7, Text, II, p. 101.
7. Ibid, p. 102.
8. व्याजी परिशुद्धा पणयात्रा । Book IV, Chap. 121, Text II, p. 121.
9. पणाद्माषकमुपजीवतो द्वादश पणो दण्डः । Book IV, Chap. 121, Text II, p. 121.

he issued fresh coins after charging five percent as *vyāji* to compensate the loss of the weight In medieval times, *baṭṭā* was charged on the coins reduced in weight From *Āin-i-Akbarī* we know that the three degrees of the *muhar*, which was current from the begining of the reign of Akbar, passed as current and was valued at 360, 350 and 340 *dāms*, according as it had lost in weight less than 3, 6 and 9 rice grains respectively.[1]

Forged Coins and Forgers

It seems that the counterfeiting of coins was not unusual in this period as is evident from the vigilence which has been shown by the author of the *Arthaśāstra*. He has declared all those as suspect manufacturers of false coins (*kūṭarūpa-kāraka*) who were seen frequently purchasing objects used in the manufacture of coins.[2] He has given a long list of such things, which incidently inform us about the minting apparatus. This passage is referred to above to elucidate the meaning of *rūpa*.[3] A spy was to be vigilent in detecting a counterfeiter and the latter was to be banished when detected.[4] The manufacture, acceptance and exchange of counterfeit coins (*kūṭa-rūpa*) was punished with a fine of 1000 *paṇas*. Their entry in the state-treasury was a capital offence.[5]

1. Blochman, Āin-i-Akbari (translation), I, p. 32.
2. Book IV, Chap. 4, Text II. p. 137.
3. *Ante*, p. 3, f.n. 2.
4. Book IV, Chap 4, Text. II, p. 137
5. कूटरूपं कारयातः प्रतिगृह्णतो नियपियतो वा सहस्रं दण्डः । कोशे प्रक्षिपतो वधः । Book IV, Chap. 9, Text II, p. 121.

THE RIGHT OF MINTING COINS IN ANCIENT INDIA

LALLANJI GOPAL

State and Coins—Smith's theory about punch-marked coins

V. A. Smith[1] originated the view that the punch-marked coinage was a private issue of guilds and silversmiths with the permission of the ruling powers. But the independent works of Spooner,[2] Bhandarkar[3] and Walsh,[4] revealing the coins of particular regions to have marks occurring in certain constant and regular groups, have established that the coins recovered so far are all State issues of particular areas. It is, however, to be admitted in favour of Smith that as merchants and traders are the people most concerned with the smooth sailing of commercial transactions, the coins must have been originally initiated by them. The fact of there being no extant specimens of punch-marked coins issued by guilds and silversmiths may be explained as due to their peculiar marks having so far escaped the notice of scholars. It is also possible that when the State assumed the function of minting coins, earlier private issues in circulation were withdrawn to be given a new impress.[5]

Correlation between imperialism and the beginning of currency

The State issues are to be explained as due to the rise of imperialism in that period. The formation of strong monarchies had started in the age of the Buddha, nay even towards the close of the Vedic period. The evolution of imperialistic tradition is related with the growth of a coinage system both as cause and effect. It was the growing needs of the States that necessitated a regular State coinage. Money was needed for several works of basic importance. Cash money was essential for maintaining a standing army. Moreover, with the stabilisation of society and the accompanying rise in the scope of the activities of a State, the king was required to have enough cash. Tradition, which speaks of Kauṭilya amassing wealth before undertaking his

1. *Catalogue of the Coins in the Indian Museum*, p. 133 ; cf. Cunningham—*Coins of Ancient India*, p. 58.
2. *ASI-AR*, 1905-6, p. 153.
3. *ASI-AR*, 1913-4, p 220 ff.
4. *JBORS*, 1919, pp 18 ff ; *JRAS*, *Centenary Supplement*, 1924, p. 175.
5. S. K. Chakrabortty—*Ancient Indian Numismatics*, p. 129.

scheme of replacing the Nandas by another power,[1] attests to this importance of coined money. The Nandas, the first important imperial dynasty, are known to have acquired huge wealth. Patañjali records the Mauryan policy to collect money.

The evolution of coined money in its turn served as a factor in the establishment of imperial power. The coined money gave the State wide powers. Its control over the different sections of society increased. A coinage system enabled a king to pay the State officers in cash and thus did away with much of the chances for the growth of a feudal order which necessarily weakens a central power. It is not without significance that the evolution and growth of the so-called feudal order after the disintegration of the Gupta power took place in the period which saw the beginning of a gradual decrease in the number of coins. This suggests a strong correlation between the two.

Early state issues

It is reasonable to suppose that the State took upon itself early the duties of minting coins, which had a growing importance in the set-up of the new society. The patient researches of a long line of scholars, among whom Durga Prasad,[2] Walsh[3] and D. D. Kosambi[4] are prominent, have helped us to identify the punch marked coins to belong to the individual monarchs of the Śaiśunāga, Nanda and Mauryan dynasties or as the independent local currency of the Kośala kingdom before it was absorbed by the Magadha empire.

State prerogative to issue coins

There were, however, some dynasties that are known not to have issued their own coins.[5] It seems that a State issued coins only as a matter of convenience. If sufficient money was already in circulation no need was felt to mint new coins. Coins were no doubt regarded as one of the insignias of royalty but their absence did not necessarily mean the negation of political independence. All this, however, cannot be construed to deny the king the exclusive right of minting coins.[6]

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1. Cf. *Mahāvamśaṭikā* and Jain tradition (R. K. Mookerji—*Chandragupta Maurya and his times*, pp. 368, 372).
2. *JP of ASB, (N S.) Num. Supp.* XLV and XLVII.
3. *JBORS*, 1919 and 1939 ; *JRAS*, 1939 ; *JNSI*, II and IV ; *MASI*, Vol. 59.
4. *NAI*, IV pp. 60-66.
5. Eg. the Vākaṭakas, Pallavas, Gaṅgas, Kadambas and Ikshvākus. The Pālas did not issue regular coins.
6. K.V.R. Aiyangar—*Ancient Indian Economic Thought*, p. 79.

Minting of coins—a state monopoly

The *Arthaśāstra* reveals the State as exercising complete control over the coinage system. The minting of coins was a State monopoly. The Superintendent of Mint was authorised to issue coins on behalf of the king.[1] A person making a counterfeit coin or one using it was to be heavily punished.[2] Elsewhere, a fine of 25 *paṇas* is provided for offenders other than the manufacturer, the seller, the purchaser and the examiner[3] of coins, implying thereby that those exempt here were really more serious offenders, deserving heavier punishments. The king was further required to set spies after the manufacturers of counterfeit coins and to banish them when their guilt was proclaimed.[4] The *Lakshaṇādhyaksha* or Superintendent of Mint of the *Arthaśāstra* is named as *Rūpyādhyaksha* in the *Amarakośa*[5] Kings used to guard zealously this right of theirs to issue coins. Even as late as 592 A.D. we find it stated in the inscription of Vishṇusheṇa that a person who used counterfeit coins was fined six and one-fourth silver coins and that no excuse for reduction of the fine in the case of this crime was allowed.[6]

State supervision over coins

The State exercised a general supervision and control over the media of exchange. The State officer named *Rūpadarśaka* mentioned in the *Arthaśāstra*[7] regulated currency both as relating to commercial transactions and as legal tender admissible into the treasury. The *Arthaśāstra*[8] prescribes fines on an examiner of coins declaring an unacceptable current coin to be worthy of being entered into the treasury or rejecting an acceptable current coin. This *Rūpadarśaka* is evidently the same as the officer called *Rūpatarka* mentioned by Patañjali.[9] The inspection of current *kārshāpaṇas* seems to have been his chief duty.

Right of merchants to mint coins—Arthaśāstra evidence

It is the translation by R. Shamasastry of a passage in the *Arthaśāstra* which forms the basis of the view that corporate bodies had the right to issue coins. The translation runs : "the State goldsmith shall employ artisans to manu-

1. II. 12
2. IV. 1
3. II. 12
4. IV. 4
5. II. 9. 92.
6. *JRASB*, XVI, pp. 117 ff.
7. II. 12
8. IV. 1.
9. I. 33 ; on Panini I. 4.52. He is referred to as examining a coin and people are said to cause him to examine a coin.

facture gold and silver coins from the bullion of citizens and country people."[1] This translation has been approvingly quoted by several scholars.[2] Others, who explain the expression *paurajānapadānām* to mean two corporate bodies, one for the whole country (excepting the capital) and the other for the citizens of the capital,[3] have opined that the State manufactured the coins of corporate bodies.[4] But the passage does not imply that the State goldsmith minted coins for the public.[5] It simply refers to the State goldsmith manufacturing ornaments of silver and gold for the public.[6] A careful study of the scheme of chapters in the *Arthaśāstra* also supports this explanation of the passage. The Superintendent of Mint and the Examiner of Coins are mentioned in chapter 12 of the second book of the *Arthaśāstra.* If *Sauvarṇika* was really a manufacturer of coins he would have been better referred to in this chapter dealing with the minting of coins and not in a subsequent chapter.[7] Further, it appears more reasonable for the Superintendent of Mint to have been in charge of minting coins even for corporate bodies and general public. In the thirteenth chapter of its second book, the *Arthaśāstra* requires the Superintendent of Gold to construct a goldsmith's office for the manufacture of gold and silver articles and to appoint a skilful and trustworthy goldsmith (*Sauvarṇika*) to have a shop in the centre of the road. The passage in dispute is the first line of the next chapter (II. 14). It gives a separate account of the functions of the State goldsmith (*Sauvarṇika*) evidently because of the importance of his work.

Indications of private mint

But this is not to suggest that the practice so common in India of traders and merchants preparing mohurs or metallic pieces of definite weight did not exist in those times. The charges viz. *rūpika, vyāji* and *pārīkshika*[8] were really realised when such metallic pieces were paid to the State treasury in connection with business transactions. The *rūpika* was a discount consisting partly of a seigniorage for coins issued at their metallic value and partly of compensation for depreciation. The *vyājī* was the amount realised because of the difference of 5% between the royal and the commercial

1. II. 14—*sauvarṇikaḥ paurajānapadānām rūpyasuvarṇamāveśanibhiḥ karayet.*
2. Cf. A N. Bose—Supra, p. 365.
3. K. P. Jayaswal—*Hindu Polity,* Ch. XXVII.
4. Ibid., pp. 254, 255; Pran Nath—Economic Conditions, p. 87.
5. *JP of ASB (N S.) Num. Suppl.* No. XL, p. 10,
6. Cf. Ganapati Sastri's edn. I p.
7. II. 14
8. *Artha.* II. 10.

measures. The *pārīkshika* was evidently the charge for testing the purity and weight of such metallic pieces.[1]

Negama coins

Opinion is sharply divided on the significance of certain coins found at Taxila[2] with the word 'negama' on the obverse and sometimes a name on the reverse. Some scholars find in these coins a corroboration of the view that corporate associations of traders did actually issue coins.[3] Jayaswal opined that the Negama coins were issued by the State for the association of the city merchants while the Janapada coins were the issue of the corporate body for the whole kingdom excluding the capital.[4] Jayaswal's theory has been criticised because of the interpretation he proposed for the term Jānapada. D. R. Bhandarkar[5] has suggested that *negama* stands for the *naigamāḥ* of the Smṛtis in the sense of City States. As, however, has been shown elsewhere,[6] *nigama* means a particular type of locality inhabited by traders and businessmen, the term naigamāḥ may have been derived both in the sense of a merchant and the corporate body of the merchants residing in that locality. The latter sense finds support from several authoritative legal commentaries which explain the term to mean a merchants' guild. It may, therefore, be suggested that a negama issued coins as the authority in charge of a particular city. The view that merchants' guilds had the privilege to issue coins is not inherently revolting. As suggested above, it is likely that merchants were probably the first to begin the minting of coins. Some small States might have allowed the merchant guilds to retain their privilege to mint coins for sometime. It is to be remembered that originally the States were not very particular to claim coin-minting as their privilege. They seem to have acquired the exclusive right of minting coins only gradually. It is not without significance that 'negama' coins do not appear in later times when the State prerogative had been established firmly. But, it is possible that even the negamas were allowed to mint mohurs or metallic pieces equal to their metallic value.

1. *JPASB*, *(N.S.) Num. Suppl*, No. XL. p. 10.
2. Cunningham- *CAI*, pp. 63-65, Plate III. Such coins have been reported from some other sites like Kauśāmbī etc.
3. Rapson—*Indian Coins*, p. 3 ; R. K Mookerji - *Local Government*, pp. 114 ff.
4. *Hindu Polity*, pp. 254 ff, 157
5. *Carmichael Lectures* 1918, pp. 175.
6. Cf. Ch. on Commercial Organization in my thesis "*Economic Development in Ancient India (400 B. C. to 700 A.D.)*" to be published shortly.

INTERPRETATION OF A FEW SYMBOLS ON SOME TRIBAL COINS OF ANCIENT INDIA

J. N. BANERJEA

The numerous and varied symbols and figures that appear on the early punch-marked and cast coins of India are very difficult to interpret. Various suggestions have been made by different scholars about their real nature, none of which is universally accepted. Yet, there seems to be a consensus of opinion among numismatists that most of them are of a religious character, though it is not safe to go further and try to connect them definitely with one or more of the ancient religious cults of India. The symbols or figures, however, that appear on the early local and tribal coins, which as a class are much later in point of date than the other groups mentioned above, are not so numerous and varied in character. The real nature of a good many of them again can be determined with a great deal of certainty on the basis of implicit and sometimes explicit indications furnished by the coins themselves and on other grounds. Thus, there is a good deal of justification in recognising the phallic symbol, the therio- and anthropomorphic forms of Śiva as well as the *sthala-vṛiksha* of the god on some Ujjain coins at one and the same time.[1] There can also be little doubt that the 'cock on post' device appearing on the 'cock and bull Mitra' series coins of Ayodhyā is just a numismatic characterisation of the *kukkuṭadhvaja* sacred to the god Kārtikeya, one of the earliest plastic representations of which was found at Lālā Bhagat near Kanpur.[2] The post with a recurved top, the lower part of which is put inside a railing present on the earliest variety of the Yaudheya coinage as also on the coins of the Ārjunāyanas was long ago recognised by me as a *yūpa* (sacrificial post). Before it is seen a bull which I recognised as the sacrificial bull. It was further pointed out by me that 'the bull before the *yūpa*' device on these early tribal coinage was most probably indicative of the *śūlagava* sacrifice mentioned in the *Āśvalāyana* and other *Gṛihyasūtras*, the performance of which was supposed to bring wealth and prosperity. The Yaudheyas are sometimes described in the earlier varieties of their coins as *bahudhānyaka*, signifying that this martial tribe whose spiritual and

1. *Development of Hindu Iconography*, 2nd Edition, by Banerjea, p. 113, pl. I, figs. 14-5.
2. Ibid, p. 141, pl. II, fig. 5 ; pp. 105-06.

temporal ruler was the divine war-lord Kārtikeya (Brahmaṇyadeva-Kumāra) set a great deal of importance on the attainment of riches (*bahudhanaṁ*).[1]

In the case of several other figures and symbols shown on these varieties of coins, their nature appears to be explicitly indicated by the manner in which they are represented on them. Thus, the figure of Gaja-Lakshmī on some coins of Kauśāmbī (coins of Bahasatimita) and of Ayodhyā (coins of Viśākhadeva), the figure of a polycephalous Śiva on a few coins of Ujjain, and that of Kārtikeya (Svāmi Brahmaṇyadeva Kumāra) on the majority of the Yaudheya coins can be easily recognised. That the human figure described as Viśpā(śvā)mitra in Kharoshṭhī script on the unique silver coins of the Audumbara chief Dharaghosha stands for Śiva, and the temple with the trident-battle-axe in front of it shown on a good many copper coins of such Audumbara chiefs as Rudradāsa, Śivadāsa and Dharaghosha represents a Śaiva shrine have been accepted unanimously. It is not easy, however, to determine the exact nature of some of the devices that appear on the neatly executed biscriptual coins (both in silver and in copper) that were issued in the name of Rājā Amoghabhūti, the chief of the Kuṇinda tribe. There has been some uncertainty about the exact personality of Amoghabhūti, but Allan's characterisation of him as an enterprising chief of a Himālayan tribe in the first century B. C. is certainly justifiable.[2] Allan rightly observes, "Economically the silver coins of the Kuṇindas represent an attempt of an Indian ruler to issue a native silver coinage which would compete in the market with the later Indo-Greek silver. He was probably an Indian chief who founded a short-lived kingdom at the close of the periods of Greek dominion in the Panjab in the last half of the first century B. C., which was soon swept away by the Śaka and Kushān invaders".[3]

If we accept the aforesaid statement of Allan, we can throw some light on the real nature of a few of the devices appearing on the obverse and reverse sides of the Kuṇinda silver coins. That their module was suggested by the

1. *Indian Historical Quarterly*, Vol. XVI, pp. 497 ff. The *Mahābhārata* also refers to these *ayudhajīvī* Kshatriyas known also as Mattamayūrakas as the possessors of immense wealth and prosperity ; *DHI* (2nd edition), pp. 143 ff.
2. Smith was of opinion that the name of Amoghabhūti was continued on the Kuṇinda coinage long after his disease ; *Catalogue of Coins in the Indian Museum*, Vol. I, p. 161. According to Jayaswal Amoghabhūti was an official title, and 'the coins are really anonymous; *Hindu Polity*. p. 82 note.
3. J. Allan, *BM. Catalogue of the Coins of Ancient India*, pp. cii–ciii.

hemidrachms of the later Indo-Greek rulers has been accepted by numismatists, but no one doubts the purely Indian character of the devices used on them. On their obverse are shown a deer to right and 'a figure of Lakshmī standing facing on a lotus and holding a lotus in her uplifted right hand' (Allan). The symbol between the horns of the deer described by Allan as 'the cobra symbol' is undoubtedly the *Śrīvatsa* mark, and the Lakshmī figure and this mark jointly establish the identity of the deer device. It is most probably nothing but the theriomorphic representation of the goddess herself. So here also, as in the case of Śiva and his emblem and two forms on a variety of the Ujjain coins mentioned above, we find the symbolic, anthropomorphic and theriomorphic representations of the goddess at one and the same time. That the goddess was also conceived as a deer by the ancient Indian sages is proved by the first verse of the *Śrī sūkta*, a late supplement of the *Ṛigveda*. It reads :

Hiraṇyavarṇām hariṇīm suvarṇarajatasrajām |
Chandrām hiraṇmayīm Lakshmīm jātavedo mamāvaha ||

The Ṛishi invokes Agni to bring to him 'the moon(like) golden (goddess) Lakshmī who is a golden-coloured deer (adorned with) gold and silver garlands'. The deer is proverbially swift-moving and restless, and so is the goddess of fortune and wealth, who is usually described in Indian literature as *chañchalā* (fickle, restless). But the three-arched mountain symbol with crescent shown below the deer and the six-arched hill-device below the *Nandipāda triśūl* symbol on the reverse, both probably signifying Mount Meru in this context, may have subtle reference to the king's desire for ensuring the stable residence of the goddess in his realm.

There are six symbols also systematically arranged on the reverse, two of which (the *Nandipāda triśūl* and the six-arched hill in the centre) have just been mentioned. The auspicious *Swastika* mark with the *Vardhamāna* below it appear on the left, and a zig-zag line probably indicating a river is shown below the hill device in the centre. The right side is solely occupied by a peculiar device which requires some explanation. It consists of a vertical shaft arising from some sort of a railing, the top section of which is intersected by three parallel horizontal lines projecting slightly on either side of the main vertical shaft ; from these side projections hang short stumpy objects at regular intervals, which are probably nothing but schematic representations of garlands or wreaths. Cunningham does not describe the device, and V. A Smith calls it 'a conventional tree within railing' ; Allan without naming it in any way simply gives a line drawing of it in the

descriptive section of his *Catalogue* (p. 159). But this peculiar device may stand for nothing but a sketchy outline of the *Indradhvajasampat*, a royal insignia so graphically described by Varāhamihira in his *Bṛihatsaṁhitā* (Ch. 42, S. Dvivedi's Edition). The ensign named after Devarāja Indra was a wooden post, well decorated with flower and jewel garlands, which was given to Indra by Vishṇu for victory over the Asuras. The Saṁhitākāra tells us that the gods being repeatedly defeated by the demons were advised by Brahmā to go to the great god Vishṇu for redress. Vishṇu on being approached by them gave their chief Indra this glorious ensign with the help of which they finally defeated their enemies. Then Indra gave a bamboo replica of it (*veṇumayīṁ yashṭiṁ*) to the Chedi king Uparichara Vasu who paid due homage to it. Thenceforward it was ordained by Indra that those kings who would worship this ensign like Vasu 'will possess good fortune and wealth, their injunctions will be obeyed in this world, their subjects will attain happiness and will be free from fear and disease, and will enjoy plenty of food'.[1] The Kuninda chief Amoghabhūti very probably carved out a short-lived kingdom for himself during the decline of the Greek power in the north, and issued these remarkable silver coins in imitation of the Greek module. But the devices that were used by him on his coins were purely Indian in character, and were indicative of good fortune, wealth and victory in a clearly Indian way. This seems to be the real significance of the symbolic language of his coins.

1. *Brihat samhitā* (Dvivedi's Edition), Ch. 42, vv. 9-10 :
Prīto mahena Maghavā prāhaivaṁ ye nripāh karishyanti |
Vasuvad-vasumantaste bhūvi siddhajñā bhavishyanti ||
Muditāḥ prajāścha teshāṁ bhayarogavivarjitāḥ prabhūtānnāḥ

NORTH INDIA AFTER THE FALL OF THE MAURYA EMPIRE

R. C. MAJUMDAR

About forty-four years ago I wrote an article in Bengali,[1] and nine years later, two in English,[2] on the subject indicated by the title of this paper. The progress of Indology during this long interval has invalidated, or at least rendered very doubtful, many of the assertions confidently made by early scholars in those days, and very different views are now taken by scholars regarding Pushyamitra or the Śuṅga dynasty founded by him. But, generally speaking, these views are arrived at in connection with other connected or allied topics, particularly the Indo-Greek rule in India, and the condition of Northern India after the fall of the Mauryas does not seem to have been undertaken as an independent study, by itself, free from the various theories about the Indo-Greeks and Kushāṇas. It is necessary therefore to make a fresh study of the subject.

In the first article, named above, I strongly criticised the views of MM. Haraprasad Sastri that Pushyamitra led a Brahmanical revolt against the Buddhist Mauryas, and tried to show that the replacement of the Mauryas by the Śuṅgas was no more due to any religious action than the succession of the Kāṇvas to the Śuṅgas, both of whom followed Brahmanical religion. This view was repeated by H. C. Raychaudhuri,[3] and is now generally accepted. So this point needs no further discussion.

According to the testimony of the Purāṇas and the *Harsha Charita*, Pushyamitra usurped the throne of Magadha after killing the last Mauryan King Brihadratha. This view has been accepted by all scholars, and it is a rational presumption that he celebrated his horse-sacrifice at his capital city Pāṭaliputra after the horse was led back after a year's victorious campaign.[4]

The performance of this sacrifice is mentioned in Kālidāsa's *Mālavikāgnimitra*, and has been more than confirmed by

1. *Mānasi o Marmavāṇī*, 1323 B. S. (1916 A. D.), p. 225.
2. *Indian Historical Quarterly*, I (1925), pp. 91 ff., 214 ff.
3. *Political History of Ancient India*, 5th edition, pp. 354 ff. (The first edition of the book was published in 1923).
4. Only one scholar has expressed doubts about it, as will be noted later.

an epigraphic record which refers to Pushyamitra as performer of two horse-sacrifices.[1]

The authenticity of the sacrifice having been thus established, we may look a little more closely into the account given in the drama. According to it the news of the sacrifice was conveyed to Agnimitra, then ruling at Vidiśā, in a letter written by his father Pushyamitra from the sacrificial enclosure (*Yajña-śaraṇa*). He says that he had sent Vasumitra (son of Agnimitra), with hundred princes, to guard the sacrificial horse, let loose as a challenge to other kings, with instruction to return within a year. The horse, while roaming on the 'south' or 'right' (*dakshiṇa*) bank of the Sindhu river was seized by a Yavana cavalry squadron. Vasumitra, after a fierce fight, defeated the Yavanas, and returned with the horse. Pushyamitra concludes the letter by asking his son Agnimitra to come with his wives and witness the sacrificial ceremony.[2]

The river Sindhu was taken by Wilson to mean the well-known Indus river, and there is no doubt that this is the most natural interpretation. When a writer mentions the name of a famous river like Sindhu or Gaṅgā, he obviously refers to the well-known river of that name. There are several small rivers known as Kali Sindhu or Sindhu, but if the author had any one of them in view, he would have surely added some qualifying epithet to distinguish it from the one which, he knew, would naturally occur to the mind of his reader. The grounds on which this natural interpretation has been rejected are thus stated by Cunningham: "But as Pushyamitra and his son Agnimitra are called the rulers of Vidiśā, which is described as lying to the north of the Vindhya mountains, and as bounded by the kingdom of Vidarbha or Berar on the South, the Sindhu of the drama cannot possibly be the Indus. The great Indus also flows from north to south, and has no south bank, on which the skirmish with the Yavana cavalry, as described by Pushyamitra could have taken place, ... the only one which has a south bank is the famous Sindhu of Narwar."[3]

The second argument may be easily disposed of. The Sindhu of Narwar, like the Indus, runs north to south, but has bends towards the west at some places. The Indus has also similar bends, the most prominent being the one at about ten miles below Attock, where for nearly another

1. *Epigraphia Indica*, XX, 57
2. *Mālavikāgnimitra*, Act V. For an English translation of the letter, cf. V. A. Smith, *The Early History of India*, 3rd Ed., p. 201.
3. *Numismatic Chronicle*, 1870, pp. 226–7 ; *IHQ*, I, 215–6.

ten miles the Indus flows in a due east-west course. Further, the expression taken to mean 'south bank' may also mean the 'right bank.'

The first argument of Cunningham is weaker still. Pushyamitra has not been called the ruler of Vidiśā, and the invitation to Agnimitra, who was ruling at Vidiśā, to witness the sacrificial ceremony, shows that Pushyamitra himself was ruling elsewhere, presumably at Pāṭaliputra. As a matter of fact there is no valid ground to suppose that the successor of the Maurya empire ruled over only Vidiśā or a small principality like it. The extent of Pushyamitra's empire must be determined on independent grounds.

There are some indications in the *Mālavikāgnimitra* that Pushyamitra ruled over an extensive territory. These are the *Aśvamedha* ceremony and the instruction to Vasumitra to let the horse roam at large for a year. This is certainly incompatible with a small Kingdom.

If we presume that Pushyamitra performed the ceremony at Pāṭaliputra, the letter written by him contains an indication that the Sindhu mentioned in it as the scene of the battle between the Greeks and Vasumitra cannot be the Sindhu of Narwar. For, in that case, the battle must have taken place within, or not far from, the boundary of the kingdom of Vidiśā, and its result must have been known to Agnimitra before it reached him via Pāṭaliputra. Yet the breathless anxiety with which the mother of Vasumitra was listening to that part of the letter which mentioned the fight in which his son was engaged, leaves no doubt that the Court of Vidiśā was completely ignorant of the incident. On the whole, one, unprejudiced by any *theory* of the history of the period, is bound to take the Sindhu mentioned by Kālidāsa as the Indus, and not a small, almost insignificant, river of that name. One might as well take the Gaṅgā to mean the Wainganga or Penganga in C. P., and identify the famous Yamunā or Kālindī with the rivers of the same name in Bengal.

But while there seems to be little doubt that Kālidāsa used the name Sindhu to denote the Indus, it is not so easy to determine how far we can accept, as historical, the reported fight between Vasumitra and the Yavanas on the banks of that river. That Kālidāsa knew some authentic details of the reign of Pushyamitra is proved by his reference to the *Aśvamedha* sacrifice which is authenticated by epigraphic record. That the Yavanas or Greeks poured into India from the north-west during the reign of Pushyamitra is also well authenticated by coins. A strong presumption, therefore, arises in favour of the account given by Kālidāsa.

• Unfortunately no positive and reliable evidence is available regarding the extent of Pushyamitra's empire. The question has been complicated by the various theories about the invasion of India by the Bactrian Greeks, and it is necessary to discuss these before proceeding further.

It was generally held by the older generation of scholars that the Greeks under either Menander or Demetrius made extensive conquests in the interior of India, advanced up to Pāṭaliputra, and even seized it for a time. All this is based upon the evidence of coins, the incidental references in Patañjali's *Mahābhāshya* about the siege of Sāketa and Madhyamikā by the Yavanas, and the account given in the Yuga Purāṇa section of the *Gārgī Saṁhitā.*

The verses in the Yuga Purāṇa section were originally translated as follows :

"Then the viciously valiant Greeks, after reducing Sāketa (in Oudh), the Pañcāla country and Mathurā, will reach (or take) Kusumadhvaja. Pushpapura (Pāṭaliputra) being reached......all provinces will undoubtedly be in disorder."[1]

On the basis of all these, it was held by Tarn, that Menander, the general of Demetrius, conquered Mathurā, Pañcāla, Sāketa and Magadha as far as Pāṭaliputra.[2] There is no doubt that such a view of Greek conquest is mainly responsible for the interpretation of Sindhu in the *Mālavikāgnimitra* as a river, in Central India by many scholars. They believe that the Greek cavalry, who fought with Vasumitra, formed a part of the victorious Greek army Tarn, for example, holds that the territory of Menander extended up to the Sindhu tributary of the Chambal and "Vasumitra, who was guarding the horse, came to the south bank of the Sindhu and had a brush with some Yavana cavalry who were patrolling the northern bank".[3] Tarn observes that the view that Kālidāsa's Sindhu was the Indus is "historically nonsense."[4] But, one may ask, is it a greater nonsense than to suppose that a king, resolved to establish his paramountcy, and letting loose a horse for the performance of the appropriate sacrifice, would send an army on a conquering expedition when the Greeks had seized Pāṭaliputra, his capital city, the Greek sovereignty was established in the heart of India, and a Greek army was patrolling the banks of the Sindhu—tributary of the Chambal ? It is forgotten by these scholars that according

1. H. C. Raychaudhuri, op. cit , p. 354.
2. For a recent exposition of this view. cf. W. W. Tarn, *The Greeks in Bactria and India*, 2nd Ed., pp. 146–7, 227.
3. Tarn, op. cit., 228.
4. Ibid.

to Kālidāsa, Vasumitra was at the head of a conquering expedition for a year to proclaim the paramountcy of Magadha, and this is hardly compatible with the view that the Greeks had already seized Pāṭaliputra and were still ruling over a vast region in India extending almost up to the border of the Vidiśā Kingdom.

It has often been unfortunate for Indian history that a theory, once propounded on very insufficient grounds by a high authority, comes to be looked upon as an established fact, and every historical incident bearing upon it is twisted to support it. An apt illustration of this is furnished by the above theory of the invasion of the Bactrian Greeks on the basis of which the entire history of Northern India after the fall of the Mauryas has been reconstructed.

Dr. A. K. Narain, the latest writer on the subject, has demonstrated that Tarn's theory about Menander's conquest of mid-India has no basis to stand upon, and doubts whether he made any conquest in the east beyond the Jhelum. There was only an invasion of the Greeks, of the nature of a raid, in course of which they might have reached Pāṭaliputra, but there was no conquest.[1]

Even this information is based mainly upon the Yuga Purāṇa, the discovery of a better manuscript of which puts an altogether different complexion upon the whole episode. According to the correct reading of the passage, quoted above, it is not the Yavanas who conquered Mathurā and Pañchāla, but the ruling powers of Mathurā and Pañchāla, together with the Yavanas, attacked Sāketa and proceeded to Kusumadhwaja (identified with Pāṭaliputra).[2]

Another important point to which Narain draws our attention is that there is no valid ground to suppose that this (or any other Greek) invasion took place soon after the reign of Śāliśūka, the Maurya King mentioned in the Yuga Purāṇa. He has shown that there was only one Greek raid upon Sāketa and Magadha, and that took place during the last years of the reign of Pushyamitra, about 150 B. C.[3] This view may not be regarded as certain, but it is certainly not less plausible than the theories entertained by Tarn and other scholars before him.

We may therefore dismiss from our mind the story of the Greek invasion of India to the east of the Indus at the time when Pushyamitra ascended the throne. The two definite

1. **A. K. Narain, *The Indo-Greeks*, pp, 80 ff.**
2. **Ibid., 82-3, 174 ff.**
3. **Ibid., 83.**

facts that we know about the extent of the Kingdom over which he exercised suzerainty are that both Vidiśā (Central India) and Ayodhyā (U. P.) acknowledged his authority. For the rest we have to rely on tradition.

Reference may be made in this connection to the story preserved in the *Divyāvadāna* which tells us that Pushyamitra had an animus against Buddhism and tried to destroy the Buddhist monastery of Kukkuṭārāma at Pāṭaliputra. Having failed in this enterprise, he proceeded to the north-west as far as Sākala (Sialkot), and even beyond, and tormented the Buddhists. P. C. Bagchi has traced the substance of this story also in the *Mañjuśrīmūlakalpa*, and, after an elaborate discussion, accepted the campaign of Pushyamitra in the north-west as a historical fact.[1] Tarn also regarded it as not altogether devoid of truth.[2] Of course, the story is at best a very old tradition, and we cannot accept it in all its details. But it pre-supposes a wide-spread belief that Pushyamitra's empire extended up to the heart of the Panjab and probably even beyond it.

If we add to this fact the performance of two horse-sacrifices by Pushyamitra, it would not be an unreasonable inference that the Magadhan empire under Pushyamitra was a very extensive one and might not inconceivably have extended from Bihar to the Panjab. This view is indirectly supported by the evidence of coins.

The huge structure of Indo-Greek history, built up by Tarn, has tumbled down like a house of cards in the light of the inferences made by Whitehead, Allan and Narain. The coins of Menander or any other Greek ruler are not commonly found east of the Ravi. Stray specimens, but no hoards of Greek coins, have been found, and the numismatists are strongly of the opinion that such finds of Indo-Greek coins are evidence not of their rule, but of the popularity of their money, in these eastern districts. The coins also make it clear that Mathurā was never included in the Greek Kingdom, but remained in the hands of the local Kings until its conquest by the Śaka satrap Rājuvula, who, like his son, copied the local type of the coins. "Had the Yavanas been already there", wrote Allan, "there would have been a break in the Hindu coinage earlier." Tarn's view that the Indo-Greek Kings ruled in Mathurā is therefore quite without foundation.[3]

1. *IHQ*, XXII, 82-91.
2. Tarn, op. cit., 177-8.
3. A. K. Narain, op. cit., 88-9.

The coins discovered in Mathurā, Pañchāla, Avadh, and other localities in U. P. show that local ruling dynasties flourished there in the post-Mauryan period.[1] The more precise dates assigned to these ruling dynasties by the numismatists have been influenced by the supposed date of Kanishka. For example, no less than fifteen local kings are known from their coins to have ruled at Mathurā, followed by six satraps, four with Indian, and two with non-Indian, names. The reign of all these rulers is pushed back by Allan before the end of the first century B. C., presumably because according to the current view of Kushāṇa chronology, Kanishka ascended the throne in 78 A. D. or not long afterwards. As is well-known, the date of Kanishka is far from being settled yet. A close examination of the different theories on the subject shows that the scholars are moving in a vicious circle, supporting the theory of 78 A. D. with the proposed dates of Satraps Rājuvula and others, which were themselves postulated mainly on the basis of the assumed date for Kanishka.

If we dismiss from our mind the cobwebs of theories that have gathered round the Indo-Greek, Parthian, Śaka and Kushāṇa rulers of India, but have no positive data to support them, we may postulate a rational view about the political condition of India after the fall of Maurya Empire. It would appear that so long as Pushyamitra was alive, he was able to maintain, to a large extent; the Magadhan Empire in Northern India, established by the Nandas and Maurvas. Though the Greeks appeared in the North-Western frontier, it was successfully defended in spite of their occasional raids. Pushyamitra signalised the revival of Brahmanical religion and the establishment of his authority over the Maurya Empire by celebrating two *Aśvamedha* sacrifices.

But some time after his death, the empire showed the same signs of decay as we find in the case of every empire in India, from the Gupta down to the Mughul period. Local chiefs or Governors gradually asserted their authority and began to assume real or virtual independence. But, as the case of Ayodhyā shows, the supremacy of Pushyamitra (and his successors) was acknowledged for some time even after his death. The end of the nominal suzerainty of the Śuṅgas was probably brought about by a joint invasion of the rulers of Mathurā and Pañcāla, aided by Greek forces, either mercenary troops, or led by a Greek King. Avadh,

1. For a detailed account of these kings cf. J. Allan, *Catalogue of the Coins of Ancient India*, pp. lxxxviii, ff.; cviii ff., cxvi ff.

which loyally stood by the Śuṅgas, was overrun, and the allies probably advanced as far as Pāṭaliputra. But their success was shortlived. Quarrels soon broke out among the heterogeneous forces and they retired. Henceforth, North India showed the usual spectacle which followed the decline of a mighty empire, namely a congeries of States corresponding to old traditional Kingdoms of Mathurā, Pañcāla, Ayodhyā, Magadha and a host of others. The beginning of this may be roughly placed in the second half of the second century B. C. and the final collapse of the Suṅgas probably took place, as stated in the Purāṇas, some time about 72 B. C.

The above reconstruction is a *hypothesis*, based on the normal interpretation of known facts and authenticated traditions. But I may claim that it is certainly not more, but probably less, open to objections than the other current views on the subject. Of course, scepticism has no limit, and almost every assumption may be challenged. One scholar, for example, has assailed my view that Pushyamitra ruled in Magadha and performed his sacrificial ceremony there, on the ground, that the *Mālavikāgnimitra* does not refer to Pāṭaliputra as the place of sacrifice.[1] He evidently ignores the unanimous testimony of the Purāṇas that the Śuṅga Pushyamitra and his successors were rulers of Magadha, the capital of which was Pāṭaliputra. Of more valid criticisms, I may anticipate a few.

In the first place, I have not interpreted the verses in Yuga Purāṇa to mean, as is usually done, that the Maurya Empire collapsed, almost immediately after the reign of Śāliśūka.[2] I think the arguments advanced by A. K. Narain, which support my view, are quite plausible.[3] Secondly, very little importance has been attached to the role played by the Indo-Greek kings, particularly Demetrius and Menander, in the history of India to the east of the Panjab. This is based on the recent views of numismatists like Allan and Whitehead, supported and elaborated by A. K. Narain.[4] Thirdly, I have assumed that the independent kingdom of Mathurā was established in the latter half of the second century B. C. As more than twenty kings are known from their coins to have ruled there before the Kushāṇa conquest, the total reign-period of these rulers would cover a period of about 300 to 400 years at the normal average rate of 15 to 20 years for each

1. *Proceedings of the Indian History Congress*, XII (1949), p. 57, f. n. 9.
2. H. C. Raychaudhury, op. cit., p. 353.
3. A. K. Narain, op. cit., p. 85.
4. Ibid., Chapter IV, specially pp. 85 ff.

reign. This would bring them down to 150 or 250 A. D. which is incompatible with the date assigned to Kanishka. But the only positive datum about the chronology of the Kushāṇas that we possess so far is that they ruled in Mathurā for a century before it passed into the hands of the Imperial Guptas. We have no reason to hold that this later event took place before the second half of the fourth century A. D. The date of the Mathurā kings according to my view is not therefore in conflict with the known *facts*, as distinct from *theories*, about Kanishka. I have discussed this problem in another paper[1].

1. (To be published shortly in a monograph on the Date of Kanishka incorporating several papers submitted to a symposium held in 1960 at the School of Oriental and African Studies, London, AKN).

SOME HYPOTHESES ON THE MILITARY AND POLITICAL STRUCTURE OF THE INDO-GREEK KINGDOM

ALBERTO M. SIMONETTA

This attempt to propose a few hypotheses on the political structure and the military organisation of the Indo-Greek kingdom shall probably be considered by many a reader as bold indeed, and I expect that their chief criticism will be, roughly, the following one: when one considers that, apart from the coins, all the material remains of this realm might easily be displayed in a couple of shelves of an exhibition case and all the literary evidence on the Indo-Greek history might be printed in half a dozen pages, it is fair to admit that any hypothesis on the political, social and military organisation of this state rest on such flimsy ground that it may well seem wise to wait for better evidence to be discovered before starting such attempts.

To this, instead of taking shelter behind the excuse that hypotheses in this field have already been proposed by various authorities (cp. Tarn, 1951), I shall reply that hypotheses are tools to be used to plan further investigations and to be tested against their results, and do not pretend to be the final answer to any problem. Scientific investigations cannot, indeed, be either planned or implemented without the framework of hypotheses; and, since archaeology endeavours rather to recover people's lives than to collect the dried bones of their artifacts, to try to figure which sort of reign is the one which lies buried in Afghanistan and in Pakistan is permissible and justified.

It has been shown by Wolski and by Narain that Greek settlements existed in Bactria in the times of the Achaemenids, and that a steady inflow of Greek colonists came in the country during the rule of the Seleucids. The Greek colonists, however, did certainly settle only in the towns, whether pre-existing or newly founded ones, as this was a constant pattern of Greek colonisation everywhere. Indeed the concentration

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of the colonists in the towns, rather than their scattering over the country (except obviously for a few officers and traders) was a matter of necessity to the Greeks: everywhere they were a small minority settled within a potentially, when not actually, hostile population, and it was only by concentrating into fortified townships that they could survive: their battlements, being virtually impregnable for the barbarians, afforded a security, under which shelter their superiority in trade and in many crafts assured the prosperity of the colonists. Finally, by living together in substantial groups the colonists might perpetuate themselves as an ethnic group, a matter of considerable importance to all minorities, and capital for such a proud people as the Greeks, who baldly lebelled all foreigners as "barbarians."

There is no doubt that interbreeding between the Greeks and the native population occurred: suffice it to read Xenophon to see how much the Greek soldiers appreciated the Oriental beauties, but whether this had the vast social impact postulated by Tarn, who always thinks of Alexander and of his policy (which on this particular issue was severely criticized by his contemporaries), seems to me quite dubious. It seems more probable that the "mixellenes", as Tarn calls them, formed a sort of caste by itself, intermediate between the ruling Greeks and the native population (which in the Indian territories was almost certainly divided, at least to some extent, into castes).

Both Alexander and the Seleucids established military colonies in Bactria and we know that land was granted to the colonists in the Seleucid empire, but the Greeks were not supposed to till the soil themselves: they were rather to live on the revenue of these lands, tilled by slaves, and provide a sort of territorial militia, which insured the control of strategic points while forming centers from which the Greek civilisation could penetrate the country.

This is the proper point to examine the possible military organisation of the Indo-Greeks.

To be an effective weapon, the phalanx, in Alexander's times, required such a high degree of training and drilling that a long period of active service was required, and therefore both the kings and the city states did no longer rely on the city's levies for campaigning, these being mainly employed for garrison duty and other auxiliary services, while standing armies and mercenaries were used on the battlefield.

It may be briefly recalled that the hoplites (whose equipment was, in the Macedonian army, lighter than in the Greek armies) were to form, in the field, a sort of slow moving spear-wall, as the long sarissae of the first four or five ranks were all protruding through the interstices of the front line. Owing to the length and weight of the sarissa, such an array was effective only if it moved keeping an unbroken front and, as a typical example of the importance of keeping the phalanx locked together, one may recall the battle of Pydna, where the highly trained and powerful legions were easily rebuffed by the phalanx whilst it stood its ground, but as soon as it started advancing on broken ground at a hurried pace, its front began to crack and the Macedonians were easily cut to pieces by the Romans.

Again the hypaspista, the light infantry, required an even more thorough drilling : they were to move quickly, and yet keep their ranks unbroken, in order to link the cavalry with the hoplites. We know for certain that hypaspists existed in the Indo Greek army, as Strato I is shown wearing the typical hypaspist enquipment in his first issue under the regency of Agathocleia. The Macedonian hypaspist, being more heavily armed than the Greek peltast, had higher possibilities both in attack and in defence, and his high military value is proved by the fact that the agema of the hypaspists (one taxeis 1,000 strong) formed the king's bodyguard. (This, incidentally, must have been true of the Indo-Greek army, as we have seen that Strato I is shown on one issue wearing the hypaspist's uniform).

In the Macedonian army, the cavalry was not as powerful a weapon as infantry: it was armed with sword and wore helmets and corselets, but its chief weapon was the lance. As stirrups were unknown to the Greeks, the lance was used as a thrusting weapon and not couched for shock as in the Middle Ages. There is no doubt, therefore, that the Greek cavalry was no match for the heavy cataphracti of the Śaka, Kushāṇa and Parthian armies. Again, the agema of the cavalry (one ila about 1500 strong) formed the king's bodyguard. The agemas of the cavalry and of the hyapspist, as they existed in the West are rather akin to the *maula*, mentioned by Kauṭilya, which formed a sort of hereditary praetorians. (By the way, if Masson (1934) is right in his dating of the *Arthaśāstra*, then we have there a picture of the political organisation of Northern India in early Gupta times which may well bear traces of the Indo-Greek organisation.)

Some additional remarks may be made about the cavalry. We have a picture of their equipment, which is the typical Greek one in several coins which show the king on horseback, while the length of the spear used may be deduced from the issues of Eucratides showing the charging Dioscuri, where it appears to have been about 20 feet long. However there is evidence to show that the spear was abandoned sometimes after the reign of Eucratides. Indeed, there is a number of issues showing the king on horseback, but usually they show him armed only with a sword (whose existence may be proved by the clearly visible baldric). Hermaeus, however, is shown armed with bow and javeline,—a very unusual armament for a Greek. There may be an explanation for this shift from the heavy sarissa to more handy thrusting weapons. The coins of the Śaka and Pahlava rulers show that they had typical cataphracts, and these were almost certainly outnumbering the Bactrian cavalry, which, when fully mobilized, was 10,000 strong in the times of Euthydemus I, and the cataphracts were much more effective than any other cavalry force of the antiquity (the day of Carrhae shows how a mixed force of cataphracts and light cavalry could beat a numerically superior Western army if it could manoeuvre on suitable ground). Once the Greeks had been swept away from the Bactrian plains, a cavalry armed with bows and javelines was obviously a much more effective force to co-operate with infantry on broken ground (as most of the Indo-Greek realm was) than the classical cavalry armed with sarissae. As for the shock for which cavalry was used in ancient times, the Indo-Greeks could rely on the elephants, and these are often shown on their coins.

The number of the Greek phalanx may be deduced by a piece of evidence which was strangely interpreted by Tarn, and has not been properly used by others. We know that when Antiochus III invaded Bactria, Euthydemus relied only on his force of 10,000 Bactrian cavalry to prevent Antiochus from crossing the Arius, and when out-manoeuvred, instead of fighting a battle, he retired to Bactra. Tarn suggests that this seemingly odd conduct of Euthydemus was forced upon him by the unreliability of his Greek troops that were liable to desert to Antiochus because of the appeal of the Seleucid name. Wolski and Narain have criticized this hypothesis, but have not discussed the point in sufficient detail. As a matter of fact, any infantry force, including the phalanx, was an easy prey to the cavalry at the river crossings, where it might be attacked before it could form ranks (cp. various passages in Xenophon), but once a

regular bridgehead had been secured, only a superior infantry force could force back the phalanx. It is therefore evident that Euthydemus could not oppose Antiochus who had an equal force of Greek infantry, while his militiae could effectively man the walls of Bactra and his light troops could prevent its complete blockade and insure supplies. We may therefore conclude that, in the times of Euthydemus, the Greco-Bactrian army could not possibly reckon more than 10,000 hoplites and hypaspists and about the same number of Bactrian cavalry, while the Greek cavalry (by comparison with other Hellenistic armies) was probably hardly 2,000 strong.

It is pretty obvious that the Greek population did not increase after Euthydemus, though it is probable that after the Śaka and Yueh-chih invasions, many Greeks moved south of the Hindu Kush, and thus the Greek population may have become more concentrated; and it is possible that some native contingents may have been equipped and trained in the Greek fashion, but it is safe to assume that the phalanx at disposal of the Indo-Greek king could have never been more than 10,000 strong. To these the native infantry should be added.

An army as the one we have depicted could not possibly be the result of occassional levies from the towns' militia; it seems much more credible that each town was yearly requested to furnish a contingent of youth, who were to serve for some years.

The existence of a standing army and the probability of a pick corp of hereditary or semi-hereditary bodyguards raised from the nobility would answer the problem of how it happened that, as it is shown by the kings' names, from the time of Menander, the dynastic principle was abandoned in the Indo Greek realm. There are indeed two possibilities: either the monarchy became elective and some sort of Senate appointed the new king when the old died, unless some adoption was used as in the times of the early Roman empire, or it was the army that, like the Roman army of the 3rd century, appointed the king. Both developments would not be surprising in India, where aristocratic republics ruled by the Kshatriyas were not uncommon in the days of the Greeks, and anyway, owing to their numerical weakness, the Greeks could not afford the risk of a minor's rule or that of an incapable prince, as it may happen in hereditary monarchies.

As I think that the Greeks inhabited chiefly in the towns, I believe that the country must have been ruled in either of the two ways, and most probably in both, depending on the areas. Either "District commissioners" were appointed, each having some light native infantry and cavalry for police service, or feudal lords were retained. Some of these lords may have been Greeks, but most were certainly local chieftains. This picture has a familiar look : it strongly recalls the times of the British Empire in India, when there were a few European regiments, native troops of the line (which in Greek times would have provided comparatively large and formidable corps of archers and of light cavalry), native forces at the orders of the "District commissioners" and the usual retinue of the feudal lords. When one considers that in Greek times no force of Asiatic infantry, whatever their bravery, could withstand the shock of the Greek phalanx, and that in those times, once the battlefront was broken in one point, the day was over, the Yavana army must have been almost invincible, and the real problem for the Indo-Greeks must have been not that of winning battles, but that of occupying the territory, since their number was so exiguous.

Something additional may be said of the civil administration. We know from the coins that in Śaka times there were officials called Strategos and Satraps, and from inscriptions dating from the Indo Greek times we hear of Meridarchs. These last officers were supposed by Tarn to be peculiar to the Indo-Greek kingdom, since they are unknown in the Seleucid Empire, where Eparchs are known instead. But I am indebted to my late friend Dr. Grassi[1] for the information that some of larger Egyptian Nomes were divided into Merides, which involves the existence of Meridarchs. In principle, in the Seleucid Empire, the Strategos was the military governor of the satrapy, while the Satrap was responsible for the civil administration, but in practice these offices were often combined in one person, particularly in outlying districts. It also appears, from what we know of the Hellenistic reigns, that the governor of a town was called Strategos, so that we are inclined to think that in the Indo-Greek kingdom the Satraps were responsible for provincial administration, while the Strategoi were the governors of the Greek townships, as well as of certain districts, in a subordinate position to the Satrap.

1. I take this opportunity to pay a tribute to the memory of a good friend and one of the most brilliant young papyrologists who recently died when only 35 years old.

If the picture of the pattern of Greek settlement which we have outlined is correct, then for the best chances to recover some material evidence of the Yavana kingdom, we must search for the chief towns of the Indo Greeks, probably not more than half a dozen cities, and probably the time-honoured shrines that the Greeks found when they carved their empire and which, no doubt, they honoured and endowed as it was their tradition. The search for such shrines may be easier and more rewarding than that of the Greek settlements. The later were certainly substantial townships whose excavation, owing to the necessity of exploring a considerable surface, requires large amounts of money and considerable teams of archæologists ; while shrines are probably easier to locate owing to the well known fact that sacred places tend to conserve their religious character through the centuries and even the ruins of pre-existing buildings are rather liable to be preserved and re-utilized, owing to their sacred character, than destroyed as it happened with civil buildings.

THE WEIGHT STANDARDS OF THE GOLD AND COPPER COINAGES OF THE KUSHĀṆA DYNASTY FROM VIMA KADPHISES TO VĀSUDEVA

DAVID W. MAC DOWALL

The gold and copper coins of the greater Kushāṇas were struck in a range of distinct denominations which formed a clear and logical monetary system But although the fully developed Kushāṇa coinage contained many important and novel features introduced by Vima Kadphises, it seems to have been based, in part at least, on earlier patterns and models. The Kushāṇa gold dinar has approximately the same size and weight as the Roman gold aureus and the introduction of the denomination by Vima Kadphises may well have been suggested by the Roman gold coin; and the weight standard of the Kushāṇa copper denominations is not unrelated to that of some of the earlier coinages of North West India and Bactria. A correct assessment of the metrology of the Kushāṇa coinage is thus an essential preliminary to any re-examination of the precise character of these associations and their chronological significance. Moreover the fully developed denominational system of Vima Kadphises did not survive unchanged. During the subsequent course of the Kushāṇa dynasty, the economy seems to have suffered a certain degree of inflation; the real values of the various denominations in its monetary system seem to have decreased; and, as one would expect, the gold coinage was increasingly debased and the copper denominations were progressively reduced in weight to keep pace with these economic developments. Some of these changes in the weight standard of coins which constituted the same denomination can give invaluable evidence for the chronological sequence of distinct issues.

The idea of the gold dinar introduced by Vima Kadphises was probably inspired by the Roman aureus, and its weight and size were probably influenced to some extent by its prototype, but there are important differences between the Roman and the Kushāṇa gold coinages. Even at its institution by Vima Kadphises, the Kushāṇa dinar did not precisely copy the weight standard of the current Roman aureus; and in subsequent issues the Kushāṇa authorities solved the economic difficulties facing their coinage in a very different way from the Roman emperors, for they maintained their dinar at a constant weight but in the course of time slightly debased the

quality of its gold, whereas the Romans maintained the quality of the aureus but progressively reduced its weight; and neither at the institution of the Kushāṇa gold dinar nor at any subsequent date was there any exact parity in weight between the Roman aureus and Kushāṇa dinar.

When the weights of the Kushāṇa gold dinars are plotted in a frequency table,[1] those of Vima Kadphises show a point of concentration at 7.9 and 8.0 gms. and were clearly struck to a standard of about 8.0 gms. The dinars of Kanishka and Huvishka show the same point of concentration at 7·9 and 8·0 gms. and were clearly struck to the same weight standard. There are slightly more specimens of Vāsudeva at 8·1 gms. than of Kanishka or Huvishka, but the point of concentration of Vāsudeva still remains at 8·0 gms. and there can be little doubt that he was maintaining the same standard. These conclusions from my frequency table are virtually the same as those worked out by Kennedy[2] from the average weights of well preserved Kushāṇa gold coins.

2 of Vima Kadphises	average	123·1 grains
11 of Kanishka	„	123·1 „
25 of Huvishka	„	123·4 „
21 of Vasudeva	„	123·3 „
59 coins of the four kings	„	123·2 „

These results differ slightly but not materially from those given by S. K. Maity[3] and based on the coins in the Indian Museum, Calcutta.

	Average wt. in grains	Percentage of gold by S.G.	Average wt. of pure gold
4 of Vima Kadphises	121·1	98·5	119
16 of Kanishka	120·45	97·67	117·5
6 of Huvishka gp. A	123 6	93·45	115·3
14 of Huvishka gp. B	119·7	96·05	110·7
7 of Vāsudeva	117·85	95·23	102·5

The slight differences between these two sets of average weights are, no doubt, due to differing states of wear, as the results of Kennedy were based on well preserved specimens while those of Maity apparently include all the dinars in the Indian Museum except the mounted ones. It is, however, clear from the specific gravity analyses published by Maity that although the weight standard of the dinar of the greater

1. See Table I.
2. *JRAS* 1912, 997.
3. *JNSI* xviii, 187ff.

Kushāṇas remained virtually the same, the percentage of pure gold that it contained was very slightly but progressively reduced.

In a comparable frequency table[1] I have plotted the weights of the Roman gold aurei of the late Republican and early Imperial periods from the collection of the British Musuem. It will be seen that the only Roman aurei which show points of concentration at 7·9 and 8·0 gms. and are struck to a standard of c. 8.0 gms. like the gold dinars of Vima Kadphises, Kanishka, Huvishka and Vāsudeva are the aurei struck by the moneyers of Augustus (19-12 B. C.).[2] The aurei of 45-44 B. C. and 43-37 B. C. show points of concentration at 8·0 and 8·1 gms. and were struck to a standard of about 8·1 gms. The subsequent groups of 36-27 B. C. and 27-19 B. C. show points of concentration at 7·8 and 7·9 gms. and were struck to a standard of about 7·9 gms. In the issues subsequent to those of the moneyers of Augustus, the dated series from Gaul 15-2 B. C. was struck to a standard of about 7·9 gms. and the Gaius et Lucius Caesares issues (2 B. C.—A. D. 14) to a standard of about 7·8 gms. The frequency table has a point of concentration at 7·8 gms. for Tiberius, 7.7 gms. for Gaius and Claudius and 7·6 gms. for the pre-reform period of Nero, and clearly shows how the weight standard of the aureus had been reduced by steady but slight and almost imperceptible changes during the early empire. The weights of surviving aurei fully confirm the explicit statement of Pliny "postea placuit XXXX signari ex auri libris paulatimque principes imminuere pondus et novissime Nero ad XXXXV."[3] Then in the reform of A.D. 64, Nero drastically reduced the weight of the aureus by 0·3 gms., and his post-reform aurei show a point of concentration at 7·3 gms. Except for the unsuccessful attempt by Domitian and Nerva to return to the heavier pre-reform Julio-Claudian standard, subsequent emperors continued to follow the reduced standard of A. D. 64 introduced by Nero.

The gradual reduction in the weight standard of the Roman aureus during the Julio-Claudian period has long been a puzzle. It was, moreover, accompanied by some significant change in the weight standard of the Roman silver denarius

1. See Table II A & II B.
2. The difference in weight between these moneyer's aurei (19-12 B.C.) and the subsequent issues of Augustus seems to have resulted in their being driven out of circulation quite soon. They are certainly not present in hoards of Claudian date like that at Bredgar (*NC* 1959, 17ff.), where the predominant aurei of Augustus are invariably the C. L. Caesares issues.
3. Pliny *NH* xxxiii, 3 (13).

during the same period. Mattingly[1] quotes the average weight of the denarius as 3·75 gms. under Augustus, dropping to 3·65 gms. under Tiberius, subsequently rising to 3·69 gms. under Gaius, 3·75 gms. under Claudius, and then dropping back sharply to 3·54 gms. in the pre-reform period of Nero. The same general trends can be seen in a frequency table of the denarii of these emperors.[2] It has generally been held, and I see no reason to doubt, that these changes in the weight standard of the denarius reflect an attempt by the Roman government to adjust the metal content of the denarius to the changing relative values of gold and silver.[3] *Prima facie*, it might look as if the gradual but slight reduction of the aureus weight in the Julio-Claudian period was another part of this process. It cannot, however, be the full explanation, because the continued policy of repeatedly reducing the weight standard of the aureus did at times necessitate even greater changes in the weight standard of the denarius than if the aureus weight had remined static e. g. when the price of silver rose, as it appears to have done in the early years of Nero, the weight of the denarius had to be reduced far more than would otherwise have been necessary.

Mommsen[4] thought that the gradual reduction in the weight standard of the aureus represented a measure of illegal profit for the moneyers But this is an equally difficult explanation, as the progressive reduction in weight is so regularly and consistently followed over considerable periods of time, and the procedure appears to be a regular monetary policy laid down by the government rather than the result of private peculation. I have suggested elsewhere[5] that this governmental policy was in fact deliberately designed to ensure that the average weight of new gold aurei minted each year was not materially higher than the average weight of the aurei of previous emperors still remaining in circulation. The reduction in the weight standard of the aureus between the accession of Tiberius (A. D. 14) and the reform of Nero (A. D. 64) did not amount to more than 0.2 gms. and this is just about the loss in weight that one would expect when an aureus had circulated for about 50 years, e. g. undated post-reform aurei of Nero from the 1927 Rome hoard[6] seem to

1. *BMC. RE.* I, Introduction, iii.
2. See D. W. MacDowall, *The Coinages of Nero* (D. Phil thesis presented to the University of Oxford, not yet published) Table 2.
3. L. C. West, *Gold and Silver Coin Standards in the Roman Empire*, *ANS. NNM* No. 94, 56 ff.
4. Mommsen-Blacas, *Mon. Rom* III, 23ff.
5. In the *Coinages of Nero*.
6. *Bulletino della Commissione Archeologia Communale di Roma* 1930, 1ff.

have lost about 0.3 gms. in a century of circulation, as their weights show a point of concentration at 7.0 gms., whereas well preserved undated aurei of Nero show a point of concentration at 7.3 gms. in a frequency table.

This ingenious device of the Roman emperors in the management of their gold coinages underlines the remarkable sensitivity of the Roman aureus and the effect on circulation of even a comparativly slight difference in weight. The effectiveness of its application can be judged by the remarkable uniformity in weight of aurei circulating side by side at any time even though the aurei may have been minted at widely different times—as evidenced by hoards like that from Rome in 1927. If then the weight standard of the Kushāṇa gold dinar were closely copied from that of the Roman aureus, it should be possible within certain limits to determine the period in which the weight of the Roman aureus was copied.

Van Lohuizen-de Leeuw[1] has recently tried to establish such a firm *terminus ante quem* in A. D. 64 for the introduction of the gold dinar as a Kushāṇa denomination by Vima Kadphises, and goes on to use this as a virtually conclusive argument for an early date for the era of Kanishkai. e. circa A. D. 78. But even on Van Lohuizen-de Leeuw's own premises, the *teminus ante quem* for the introduction of Vima's gold dinar must be brought down to A. D. 97, because both Domitian and Nerva restored the heavy weight standard of the pre-64 aurei of Nero and used it for all the aurei struck during their principates. This makes the *terminus ante quem* to be drawn from any such argument a full thirty years later, so that it does not rule out the possibility of a late first century date for Vima and an early second century date for Kanishka after all.

It is, however, clear from an examination of the weights of the Roman aurei and Kushāṇa dinars that no precise correspondence can ever in fact have been intended between the two coins even at the time when the denomination was first introduced by Vima Kadphises. The only Roman aurei that were struck to the weight standard of 8.0 gms. adopted by Vima are the aurei of the moneyers of Augustus (19-12 B. C.) ; and this is far too early a date for Vima Kadphises on any chronology. The difference between the weight standard of the pre-reform aureus of Nero[2] and that of the

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1. J. E. Van Lohuizen-de Leeuw, *The Scythic Period*, 365 ff..
2. Dr. Van Lohuizen refers to the "Augustan aureus" ; but aurei of the Moneyers (19-12 B. C.) were no longer in circulation in the Julio-Claudian period (see note 5 above) ; and the Augustan aurei of later issues that continued to circulate throughout the

Kushāṇa dinars is 0.4 gms. This difference in weight is quite a considerable one. It is equivalent to $\frac{0{\cdot}4}{7{\cdot}6}=\frac{1}{19}$th of a Roman gold aureus or about 1¼ Roman silver denarii i. e. rather more than a day's pay for an ordinary individual in the first century A. D.[1] There would indeed have been no point anyhow in an exact parity between the Kushāṇa and Roman gold denominations. They never seem to have circulated freely side by side in the same or even adjacent territories, and both coins represented quite a considerable sum of money—about a month's pay; and would probably be exchanged principally in large scale commercial transactions by international traders.

The second part of the monetary innovation of Vima Kadphises was the introduction of the large copper coins, which, with their sub-divisions, constituted a uniform copper coinage throughout the Kushāṇa territories. When the weights of these copper coins are plotted in a frequency table[2], it can be seen that each group was struck to a remarkably close standard—surprisingly so in view of the fact that they are copper coins. The large coppers of Vima were struck to a standard of about 17 gms., the half of this denomination to a standard of about 8 gms. or perhaps a little more, and the quarters to a standard of about 4 gms. It has long been extremely puzzling to know what we should call these Kushāṇa copper denominations, and most writers have been content to have them unnamed[3] or classify them as large, medium and small.[4] I think, however, that we can properly regard the large coins as copper tetradrachms struck on the Attic or Bactrian weight standard.

During the period that immediately preceded the Kushāṇa occupation of North West India, the silver denominations of the kingdoms of Kabul and the Upper Indus Valley (struck on the Indian weight standard with a tetradrachm of c. 9.6 gms.)[5] had suffered a serious debasement. The earlier

Julio-Claudian period seem, as the result of circulation, to have weighed much the same as the weight of the freshly minted aurei of Claudius etc. Cf. the weight of the aurei in the Bredgar hoard. (*NC* 1959, 17 ff).

1. The Roman legionary's pay in the early 1st cent. A. D. was 225 denarii a year: see P. A. Brunt "Pay and Superannuation in the Roman Army" in *PBSR* xviii, 50 ff; and the labourers in the vineyard each received a denarius for their day's labour, *St. Matthew* xx, 1ff.
2. See Table III.
3. As Gardner did in *BMC, Greek and Scythic kings of India.*
4. As Dr. Whitehead did in *PMC* I.
5. Cf. *BMC. Greek and Scythic kings of India*, lxviii. Gardner calls this the 'Persian standard'.

tetradrachms and drachms of Hermaeus were struck in perfectly good silver, but towards the end of their long series, the good silver coins were succeeded by coins with the same obverse and reverse types and of the same weight and general appearance but struck in copper.[1] Similarly towards the end of the series of tetradrachms struck in the name of Azes II, the tetradrachms of good silver were succeeded by coins with the same obverse and reverse types and of the same weight and general appearance but struck in base billon.[2] They were thus certainly the lineal successors of the earlier silver tetradrachms and drachms and must have been intended to represent the same denomination albeit a debased form of it, and can therefore properly be termed "copper tetradrachms". Their status is virtually the same as that of the Roman copper radiates of the late third century A. D. which were the lineal successors of the earlier silver antoninianus and constitute a later and debased stage of the same denomination. These base tetradrachms of Hermaeus and Azes were probably covered originally with a tin or silver coating, as were the Roman copper radiates, to give them an appearance that was closer to the good silver coins that they succeeded.[3] When eventually the Kushāṇas occupied the kingdom of Kabul, their issues copied the general form and weight standard of the existing currency in that territory, and so the denomination of the Kabul copper coinage struck in the joint names of Hermaeus and Kujula Kasa Kadphises[4] can equally be regarded as that of a "copper tetradrachm."

The weight standard of 17 gms. to which the large copper coins of Vima Kadphises were struck is of course very different from that of the copper tetradrachms of Hermaeus, Azes II and their numismatic successors (c. 9.6 gms. and then slightly, but progressively reduced) and has quite an independent origin. It is, in fact the normal weight standard of the Attic silver tetradrachms struck by the Indo-Greek kings in Bactria for their territories north of the Hindu Kush. There, the silver tetradrachm coinages were subsequently copied by the Yüe-chih after the conquest of the former Greek kingdom of Bactria, but in course of time the Yüe-chih series became progressively debased. One of these copied the tetradrachms and drachms of Heliocles, but the Yüe-chih coins degenerated, first into base silver and finally into

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1 Cf. A. Simonetta 'A New Essay on the Indo-Greeks, the Śakas and the Pahlavas', *East and West*, ix, pp. 168 ff.

2. Ibid..

3. Cf. Grant, *Roman Imperial Money*, p. 245.

4. Of the types described in *PMC* I, p. 179 Nos. 8 ff.

copper.[1] They still, however, retained the weight standard of the original silver tetradrachms, and in spite of progressive misunderstandings continued to use the same obverse and reverse types and even retained a jumbled version of Heliocles' name. These copper coins of the Yüe chih copying the types of Heliocles were thus intended to be the lineal denominational successors of the earlier silver Attic tetradrachms, in much the same way as the copper tetradrachms of Hermaeus and the billon tetradrachms of Azes II struck on the Indian weight standard represented the same nominal denomination as the silver tetradrachms of Hermaeus and Azes II.

At the time of the earliest Kushāṇa occupation of North West India, therefore, there were copper tetradrachms in two distinct series that represented the lineal denominational successors of the two distinct silver series of the Indo-Greek kings i.e. that struck on the Attic weight standard with a tetradrachm of c. 17 gms. and that struck on the Indian weight standard with a tetradrachm of c. 9.5 gms. In my recent paper "Soter Megas, the king of kings"[2], I argued that Soter Megas struck coins in both these series; that his local Mathura type copied the obverse and reverse types and weight standard of the copper Attic drachms of the Yüe-chih coinage that was ultimately derived from the silver coinage of Heliocles; and that his local bilingual coinage of the Taxila valley area copied the reverse, format and weight standard of the billon Indian tetradrachms of his predecessors in that area, Aspavarma, Sasan and Abdagases, who had in turn copied the tetradrachms of Azes II. I further argued that the general coinage of Soter Megas' uniform type struck to a weight standard of 8.0 to 8.5 gms. was a deliberate move to unify the coinages of the Kushāṇa territories by introducing a denomination that was metrologically related to the copper tetradrachms and drachms of the Attic standard, and which could nevertheless readily circulate alongside the existing billon and copper tetradrachms during the transitional period before it completely replaced them. Soter Megas' new denomination was indeed double the weight of the copper Attic drachms, and half that of the tetradrachms and so can properly be termed an Attic copper didrachm; at the same time, however, it was only 1 gm. lighter than the billon and copper Indian tetradrachms already in circulation.

1. Cf. Cunningham, *Coins of the Indo-Scythians, Sakas and Kushans*, p. 94 ff.

2. Paper read to the Royal Numismatic Society, London, March 1960, to be published in due course in the *Numismatic Chronicle*.

The middle denomination of Vima Kadphises was struck to the same standard as that of the new denomination of Soter Megas' general coinage—the copper didrachm—and clearly represents its lineal successor. As the large copper coin introduced by Vima Kadphises is double the weight of the copper didrachm, it should therefore be regarded as an Attic copper tetradrachm. Similarly, the small copper coin of Vima which weighs between 4 and 5 gms, i.e. half the weight of the didrachm, should be regarded as an Attic copper drachm.

Kanishka continued to strike the range of the copper denominations of tetradrachm, didrachm and drachm that had been issued by his predecessor, adding a yet smaller fraction of his own—the hemidrachm; and he retained the weight standard that Vima had used virtually unchanged, continuing to strike his copper tetradrachm at about 17 gms. Under Huvishka, however, there was a remarkable change. When the copper coins bearing Huvishka's name are plotted in a frequency table their weights cover a surprisingly wide range and do not fall into any clear pattern by denominations as do the copper coins of Vima and Kanishka; though it is possible to arrange them into three distinct groups which must represent successive phases of the same denomination through a series of progressive reductions in weight.

The first group of Huvishka consists of the coins which have the obverse legend: ÞAONANO ÞAO OOHÞKE KOÞANO commencing at I o'clock, and on the reverse a well made form of the unbarred symbol [symbol] that had been used earlier by both Kanishka and Vima Kadphises.[1] These coins show a clear point of concentration at 15 and 16 gms. and were obviously struck to a standard of about 16 gms., representing a continuation of the same tetradrachm denomination as that of Kanishka, though of course with a slight reduction in weight. The three distinct obverse forms of Huvishka's copper coinage showing the king riding an elephant, sitting cross-legged and sitting with one leg up on a couch are all represented in this first heavy group of Huvishka's tetradrachms.

The second group is characterized by the use of a distinctive barred symbol [symbol], which is generally engraved with a reasonable amount of care. The letters of the legend are larger and less well formed; the legends no longer commence at I o'clock, and are more difficult to decipher.[2]

1. e. g. *PMC*, I, Pl. xviii. No 137 and xix No. 182.
2. e. g. *PMC*, I, Pl. xviii No. 140, and xix Nos. 160, 161 etc.

These coins range in weight between 8 and 13 gms. and were apparently struck to a standard of 10 to 12 gms. They are far too heavy to be regarded as the half denomination of the first group and must represent a later stage in the coinage which saw a further and more drastic reduction in the weight of the tetradrachm. Once again all the three obverse types of Huvishka are represented in this group, though there are now some slight differences between the weights of these different groups. Coins with the elephant-rider obverse in this group generally fall between 10 and 12 gms., those with the cross-legged type between 8 and 9 gms., and those of the couch type at about 11 gms..

In each of these three obverse series, there is also a distinct third group, struck to a yet lower weight standard and which seems to mark a distinctly later chronological stage. In the elephant rider series, the third group is distinguished by a ruder and coarser type of engraving and seems to have been struck on a standard of 9-10 gms. In the cross-legged series, the third group is distinguished by similar characteristics and a very linear and angular form of the barred Kushāṇa symbol; it seems to have been struck at between 7 and 9 gms. In the couch series, it is distinguished by a reversion to the use of the unbarred form of Kushāṇa symbol and by Vima, Kanishka and the first group of Huvishka, but with the symbol drawn in a distinctively rougher way that matches the vastly inferior quality of the die-engraving; and its weights range from about 6 to 10 gms.

The weight of the better preserved coins of the last great Kushāṇa king Vāsudeva mostly fall between 7 and 10 gms. They must have been struck to a standard of 8-9 gms., and thus constitute the denominational successors of the third and latest group of the coinages of Huvishka and represent a yet later stage in the downward course of the denomination of copper tetradrachms that Vima Kadphises had introduced.

This recognition of the continuity of the tetradrachm denomination down to the time of Vāsudeva affords an important contribution to the solution of some of the extremely difficult problems presented by the range of Huvishka's copper coinages; for it enables us to distinguish three distinct chronological phases, and this in turn throws light on the significance of Huvishka's use of three distinct obverse types and of the barred and unbarred Kushāṇa symbols. The three obverse types representing the king as an elephant-rider, sitting cross-legged, and sitting on a couch are found in all the three chronological groups; and so cannot in themselves

indicate one period of issue rather than another. If their significance is not a chronological one, it might well distinguish parallel issues in the same mint serving as a mark to differentiate the product of *officinae* or sub-divisions in the same mint; but the significant difference between the weight standards, use of symbols and reverse types etc. in the two later chronological stages of all three obverse series and the comparatively independent courses which each obverse series followed make this most unlikely, and suggest rather that the three obverse types constituted the distinguishing features of three separate mints which initially produced currency for three separate regions of Kushāṇa territory, though of course the three series were sufficiently similar to enable them to exchange quite freely with each other. Full details of finds of copper coins of Huvishka from different territories should ultimately enable us to determine the predominant obverse types in the various localities of the Kushāṇa empire and in this way point to the probable locations of such mints.

Huvishka continued to use the unbarred Kushāṇa symbol throughout the whole period of the issue of his first group of copper tetradrachms struck on the heavy standard, just as his predecessors Vima Kadphises and Kanishka had done. It was only later in his reign when the reduced tetradrachm was introduced that he adopted the barred form of the symbol. This seems to introduce an important modification to the theory that the Kushāṇa symbols are "personal" and peculiar to each king, and that the bar may be equivalent to the cadency marks in English heraldry.[1]

An important aspect of this metrological analysis of the coinages of the greater Kushāṇas that should not be overlooked is the remarkable disparity between the reduction in weight of the copper tetradrachm and the reduction in real value of the gold dinar; and this throws much useful light on the general lines of economic policy that lay behind the various changes in the Kushāṇa denominations. During the century of Kushāṇa rule between Vima and Vāsudeva, the weight and intrinsic metal value of the copper tetradrachm has been reduced by about 50 per cent, whereas the real value of the dinar had only been reduced by about 6.3 per cent[2]; so that the sharp reduction in the tetradrachm's weight is not entirely or even principally explicable in terms of heavy inflationary pressures. It is equally unlikely that any rise in the price of

1. A.D.H. Bivar, "Notes on Kushan Cursive Seal Inscriptions", *NC* 1955, pp. 203 ff.
2. Based on the weights and analyses given by S. K. Maity, *JNSI* xviii. pp. 187 ff..

copper was entirely responsible for such a considerable change, though it may have been an important contributory factor. The reduction is rather to be considered as the logical development of a carefully designed monetary policy. First of all the Kushāṇa dynasty introduced a uniform copper currency throughout their territories to replace the multiplicity of existing local coinages, and at its inception this copper currency would probably be worth something fairly close to its intrinsic metal value (as no doubt were the copper and billon coinages which it was designed to replace). Then Vima Kadphises introduced a gold denomination which was intended to serve as a convenient multiple of the copper denominations for large scale commercial transactions, and to provide for such purposes the precious metal currency that had been lacking in North West India since the collapse of the silver coinage under Azes II and Hermaeus. Finally, when the new gold denominations had become firmly established in the Kushāṇa economic system so that the coinage had in effect become one based on a gold standard, Huvishka made the copper tetradrachm increasingly fiduciary in character and was able to tariff it above its intrinsic copper value inside the Kushāṇa territories because it was backed by a comparatively stable gold coinage.

ROMAN PATTERNS FOR KUSHĀṆA COINS[1]

ROBERT GÖBL

I was very happy to accept the most kind invitation of Dr. A. K. Narain, to contribute this paper to the memory of Prof. A. S. Altekar, the more so as I believe—notwithstanding the very brief and only epistolary acquaintance with this great Indian scholar—that the theme of my research would have been of real interest to a man, who was always anxious to extend his already wide horizons, as a glance of the areas covered by his works shows.

The article is a slightly extended and illustrated version of my paper presented at the Conference on the date of Kanishka,[2] arranged by the School of Oriental and African Studies at the University of London in the spring of 1960 and where I hoped—without knowledge of the regrettable event—to meet Prof. Altekar himself.

Naturally it was impossible to work up into this paper all the points brought up at this very important meeting of scholars who came from many countries to consider this problem, but I intended, in the first place, to present some view-points, and secondly, to correct some errors made in the very hasty preparation of the original paper for the Conference. Some newly found items have either supported or modified

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1. The following abbreviations are used : *RIC*=Mattingly-Sydenham, *The Roman Imperial Coinage*, 1923 ff. ; *BMC*=*The British Museum Catalogue* ; *NC*=*The Numismatic Chronicle* ; *RRC*=E. Sydenham, *The Roman Republican Coinage*, London 1952 ; P. L. Strack *Untersuchungen zur römischen Reichsprägung des zweiten Jahrhunderts*, Teil I (Trajan), II (Hadrian), III (Antoninus Pius), 1931 ff ; C=H. Cohen, *Description historique des monnaies frappées sous l'empire romain, communement appelée Medailles Imperiales.*[2] 1886 ; Cat. Bachofen=Slg. Bachofen V. Echt, *Römische Münzen und Medaillons' verfasst von O. voetter*, Wien 1903 ;

   Generally here are quoted the volumes of Roman coins ; *BMC Alex.*=*The British Museum Catalogue*, containing the Alexandrian coins.

Further abbreviations :
   A (in the Table)=Alexandrian Coinage.
   AV=Aureus
   D=Denarius
   R (in the Table)=Roman Imperial Coinage
   S=Sestertius
   TPQ=*Terminus post quem*

2. This paper is now in the press to be published by the School of Oriental and African Studies of the University of London. [At the meeting itself the papers were distributed by the participants.]

some of my earlier views. Since it had to be sent to press, the material had to be presented in somewhat unpolished form, but I hope, however, to have given impetus to further investigations. Perhaps later investigations will be more successful.

The theme treated is the question of the extent to which iconographic types coming from the Imperium Romanum influenced, or even provided, certain Kushāṇa coin-types. The fact in itself has been detected before me.[1] That I saw it independently and am also able to present some new finds, I owe to my habit of consulting the material itself first and then the literature. The reverse method may be less laborious but in this way one is able to form judgments without prejudice and the literature often confirms them.

It is a firm numismatic rule that less developed states borrow from neighbours which are already in a higher stage of civilisation. In our case, this is a question of technical organisation which proceeds parallel to other historical processes. The Kushāṇas, invading in the highly civilised territories of the Eastern Greeks, found there a highly developed currency, of which they gradually took advantage. Their first real coinage follows the transitional stage of actual or formal federal coinage of the last Greek king of this country, Hermaios (= Hermaios with Kujula Kadphises).

The first true coinage issued by the Kushāṇas also testifies to the enlarged boundaries of their empire and of their increasing contacts with other peoples. There at the gates of India, the Kushāṇas became familiar with the chief types of Roman republican coinage, in addition to the main types of the coinage in the Hellenistic East with which they were acquainted since long.

Invading and conquering India, they were finally forced to try conclusions with the Roman currency and to create one of their own to be able to resist its acceptance in trade. Here we have the proper beginning of the Kushāṇa coinage.

It is commonly accepted, that there is a general current from West to East in this period of history, and none in the opposite direction. The first historical basis is the expedition

1. As for example by R. Ghirshman, *Begram* p. 133; U. Monneret de Villard, Le monete dei Kushana el'impero Romano, *Orientalia* 17 (1948), 224, 2, and by others also before him, but all handle singular types without seeing a system. I mentioned at first this connection in my paper: Die Münzprägung der Kušān von Vima Kadphises bis Bahram IV. in: F. Altheim and R. Stiehl, *Finanzgeschichte der Spätantike* 1957, chap. 8 (R. Göbl), pp. 173 ff, esp. p. 252.

of Alexander the Great, which originally introduced coinage to this region. This event of immense historical consequence was followed by a second one of hardly lesser economic importance: the discovery of how to utilize the monsoons for sea trade with India. Both events gave great impetus to intercultural exchanges between East and West. It is, therefore, especially advisable here to look for the most natural explanation rather than for complicated theories. The basis for all that follows is that the Kushāṇas invaded India due to their interest in the trade of the Romans and of the Chinese empire with India. It seems possible, in addition to this, that the Kushāṇas were hindered in the narrow space in Middle Asia by China, the court of which never took the Kushāṇa kings to be of equal birth as we can assume on the basis of preserved sources. Having entered India, the Kushāṇas possessed the keys of the trade between the West and the East. This is the reason that we must search for the typological influence in Roman coinage first and then in the Greco-Bactrian coinage, the latter's coin-system being already broken down at this time. Roman republican and imperial denarii of the first dynasty form the denominative and iconographical prototypes of a peculiar monetary production.

Entering the India-trade, the Kushāṇas established very soon close connexions with the most important western city in this respect, namely Alexandria. Here were situated the main agencies for the Roman trade with India; here was also the centre of cultural exchange in various directions.[1] The importance of this city is to be seen with full clearness if we consider that the first Roman emperor conceded to Egypt an especial position and that he allowed to mint further more coins originally meant to be used only in this country. Thus we see a mint in activity from the early time of the Ptolemies and lasting without interruption till the end of the third century A. D. in the time of Diocletian. This emperor finished by force the life of a coinage having undergone finally the same deterioration as the coinage of the imperial mints itself. Together with Alexandrian merchants, a great number of other technically skilled people reached India for the first time in history.

Therefore we are not mistaken in assuming that some technical people familiar with the art of die-cutting and dactylography were appointed to such an activity in the Kushāṇa court in India when the Kushāṇas were getting

1. For these connections cp. all the most important remarks made by Sir Mortimer Wheeler in *Rome Beyond the Imperial Frontiers*, 1954 (Pelican Books edition, 1955), esp. pp. 200 ff. This work to be quoted also for the typological influence of Roman types into Kushana ones.

ready to arrange a peculiar systematic coinage. It is seen without difficulty even by a less experienced eye that some technical details are very similar to the Alexandrian coinage, as for example the vigorous relievo and the slightly clumsy but strong lines. We can, therefore, assume that these workers brought with them their own patterns—originals as well as working-designs. Some new iconographical creations originated evidently from the endeavour to use such patterns which met their own conceptions sometimes directly, sometimes with modification by dropping or changing details. This is one of the reasons for a certain indetermination and monotony of some types, for the poorness of attributes in the representation of some gods despite the fact that at least in the beginning the rough die-cutting prevented a more detailed and specific representation. We can see quite clearly the endeavour to find new forms and to codify certain representations, and the copiousness of types increasing from the time of Kanishka and Huvishka proves it. On the other hand, we can draw important conclusions from the restriction of types beginning with the reign of Vāsudeva I.

The vigour, ability and originality of the Kushāṇa government is proved especially by the creation of new denominations. The Greco-Bactrian silver-coinage, especially the Indian tetradrachm, deteriorated into a nearly pure copper coinage. It seemed to be inopportune therefore to restore the silver coinage. For this reason, I cannot believe that the only and certainly genuine silver piece in the possession of the British Museum[1] was intended to be a silver denomination like the Roman denarius. It was rather a proof for an intended golden Dinar-type For economical reasons the Kushāṇas very cleverly adopted a Gold-dinar of pre-Neronian standard. Under Vima Kadphises they created a double-dinar the minting of which was stopped afterwards. A half-dinar[2] corresponding to the Roman half-aureus could not possibly hold out. The quarter-dinar, on the contrary, seemed to meet the necessities better and had success till very late. In all these things the Kushāṇas showed originality and introduced these coins much sooner than the Romans. Rome created a double-aureus (binio) only under the reign of Caracalla, and a denomination, the so-called Tremissis, which could be compared with the quarter was created as late as under Theodosius I.

Now we can consider the iconographic typology. I present the special types which show the derivation with

1. *NC*, 1892, P. 69 No. 9.
2. Göbl, *l. c.* plates, No. 17.

absolute or relative certainty, having alternated a little the sequence in opposition to my contribution given at the Kanishka Conference. Some errors also are corrected. The research extended to the types of the Roman imperial coinage as well as to those of the Alexandrian provincial coinage, which are iconographically very similar and even equal to the Roman types. A great number of complementary types which can be considered as proving the theory, will be naturally found also among other contemporary provincial issues in the eastern parts of the Roman empire but the selected specimens can be judged as sufficient for our scope.

The selection of comparable types is by no means arbitrary. It presents itself spontaneously by comparison. The relatively great originality of the Kushāṇa coinage renders more difficult every research in this direction and we are confined for our scope to the reverses, where we can find similarities of the highest degree. For the obverse, there is nothing of this kind. If I mentioned above that the main source of typological influence could not be found in the Greco-Bactrian region, then this is not valid for the obverses, which we must consider here. Some obverses, as for example the bust-types extended at the ends, and sometimes even the thigh-types, are influenced just by the Bactrian types. On the other hand, some Kushāṇa obverses look like reverses, as for example the types of biga, elephant-rider and the king sacrificing at the altar. Contrary to the Roman practice, the Kushāṇa king is represented in a statuaric and scenic manner, most clearly on the coins of Vima Kadphises. A Roman emperor in such a representation would be found on the reverse of the coin. The reverses of the Kushāṇa coins are reserved, with a few exceptions, to the gods and goddesses.

This paper does not make a survey of the Roman silver currency in India. Silver coins are preserved in greater number than the Roman gold which was imported but absorbed, melted down and reminted by the Kushāṇas.[1] Such a survey of Roman silver-denarius material would deliver some interesting details useful for comparison. Here we can find a certain number of types which the Kushāṇas saw every day and got suggestions from. The Alexandrian die-cutters, designers and advisers, bound by the late-Hellenistic forms, finally wiped out the weak limits and thus the specific Kushāṇa types were born.

1. Wheeler, *l. .c* (Pelican Books edition, 1955) p. 169.

With this I hope to have demonstrated the main difficulties in finding types which can deliver sure *termini post quem* (henceforth abbreviated as TPQ). If the prototype is of general character, then we must find out at what time it was most frequent in the coinage of Rome. For special types this is much easier because they appear sporadically.

The most important basic statement is the supposition that *coins form the prototypes for coins* although other iconographic sources are not excluded. Coins are spread over a larger territory and in a larger number than other sources.

The TPQ found in this way prove relative temporal horizons for the minting of similar Kushāṇa types. A single type, naturally, could be considered as being a hazard, but this seems to be excluded if we find more types which in comparison with the imperial coinage lead always to nearly the same space of time. The impression increases, if not only the Roman imperial coinage but also the Alexandrian coinage or vice versa bears the same prototype at nearly the same time.

What follows is just an attempt which can be confirmed by more accurate observations. I have avoided a detailed discussion of the interpretation given by U. Monneret de Villard, especially regarding the problem of influence of the Palmyran art, due to lack of time.

Derivable Type of Kujula Kadphises

(*Nos. 1, 15*)[1]

On the top of all comparisons we find the well-known denarius-type of Kujula.[2] It was shown long ago with sufficient certainty that an emperor of the house of Augustus formed the prototype[3] and it should be out of question not only that on the obverse there is Augustus himself, but also that the reverse can be derived without difficulty from an Augustean type. The former view that the curulic chair

1. All numbers refer to the Synoptical Table. See also Appendix I for notes on the Table.
2. *NC*, 1892, pl. IV (XIV), 7.
3. P. Gardner, *BMC India, Greek and Scythian Kings*, p. 123 and pl. XXV, 5; cp. also J. Allan, *The Cambridge Shorter History of India*, p. 74 (suggesting as prototype the Claudius' type of Constantia on a curule chair), all quoted according to A. K. Narain's paper presented for the Kanishka Conference, pp. 6 ff.

is found for the first time on the coins of Claudius I is by no means supported by material evidence. I can introduce in the discussion a denarius of Augustus[1] which could have been the immediate prototype. On the obverse we see the terminal bust of Augustus; the reverse shows the emperor seated to l. on the sella curulis. That the direction of the figure on the reverse has changed to r. is of no importance because we find it in many cases among the copied coins. Returning again to the obverse, I regard the later emperors, beginning with Tiberius, as being out of consideration. Supposed TPQ: B. C. 29-27.

Derivable Types of Vima Kadphises

THE BIGA-TYPE (*Nos. 2, 16-19*)

We can hardly find an immediately comparable biga-type in the Roman imperial coinage. It is more probable that one of the numerous quadriga-types formed the prototype or, better, had an influence on it. One is easily reminded of some Roman republican denarii in this connection. For our purposes, the most common are the types beginning with Tiberius which were very copious in India. The immediate prototype could also be a later one in view of a stylistic peculiarity which is hardly to be ignored, namely, the representation of the wheel, seen on the obverse, in a frontal view. During the time of the house of Augustus until the Flavian period, the wheels of quadriga are seen in perspective and look oval. During the Flavian dynasty it is again in the frontal view. This is very important as we can note on the Kushāṇa coins of this time the knowledge of perspective on coin-designs as shown by the king looking out of a window-frame.

But this coin of Vima is apparently a festival issue, linked with the representation of the king as elephant-rider and which was also a typical special-issue of Huvishka (cp. Göbl 60, 61). Probably this issue was copied from a festival one in the Roman empire. Contrary to my former view,[2] I am adhering now to that of Ghirshman who first expressed the opinion[3] that this type announced the conquest of India. On the other hand, I repeatedly affirmed that the conquest of India by the Kushāṇas—at least its last and decisive

1. C. 116.
2. Göbl, *l. c.* p. 182.
3. *Bégram*, p. 133.

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phase—coincided with the Parthian war of Trajan.[1] His famous posthumous aureus (No. 19) could have been the immediate inducement to the biga-dinar of Vima, which celebrated, imitating a Roman imperial type, a kind of TRIVMPHVS INDICVS. The minor changes as in the form of the currus (only a little different, the flanks tapering into curved ends), the driver of the cart before the emperor, (while on the Roman coin the emperor is standing alone) can be Kushaṇa modifications just as the reduction of the quadriga to a biga.

Assumed TPQ: at least the Flavian period, or even Trajan's period; if the golden Aureus was the prototype, the first year of Hadrian, 117 A. D.

Of lesser importance, but certainly worth mentioning seems to me the appearance of a rudder combined with trident, axe and club on quarter-dinars of Vima.[2] I cannot believe that here is to be seen a stand or base as described by Cunningham, but it seems to me to be a combination as given above. This rudder I take as copied from certain coins of the early Empire, where the type consists of rudder and globe, thus signifying the protection warranted to the trade by the emperors since Augustus, especially in the time of Flavian dynasty. The rudder is an attribute of Śiva as well as of Poseidon, which makes it possible to interpret Śiva as protector of the trade by the water, in the same way as he is compared with Herakles in respect of his leopard's skin (lion's skin) It can be mentioned here, what we hear from Sueton, that Alexandrian merchants celebrated Augustus as protector of their liberty and wealth, having met him in the harbour of Puteoli.

Derivable Types of Kanishka

NANA WITH SCEPTRE WITH HALF-ANIMAL TOP (*Nos. 3, 20*)

Cunningham has already described very correctly the form of the sceptre.[3] This should not be disputed lightly as it has been done. In the Roman imperial coinage we find a singular comparable presentation, namely a Felicitas with Pistrix, found on coins (as an important fact also on an Aureus of Pius. cp. No. 20). To the formal parallel comes the intrinsic one, if we consider the bountiful aspect of this goddess, a fact which can hardly be dismissed.

1. Gobl, *l. c.* p. 237 (at first).
2. Gobl, *l. c.* plätes, No. 12., *NC* 1892, pl. V (xv), 8.
3. *NC*, 1892, p. 78, No. 34.

ARDOKHSHO (*Nos. 4, 21*)

The goddess is carrying cornucopiæ and we can assume as certain that this aspect must have corresponded to the Roman Fortuna, but since the rudder was not applicable to the former it was dropped. In any case we have only a point of general comparison at hand, because this type is very familiar to all cornucopiæ bearing Roman *numina*. The special and somehow unusual attitude of the goddess holding the cornucopiæ with both hands can be regarded as a solution to a problem of how to avoid an empty hand, but it finds its parallel also in the Roman coinage, as for example on an Aureus of Hadrian (No 21). Here is the basis, of course very broad, as the Fortuna-Tyche type was very popular in all the provincial coinage.

ŚIVA WITH BUCK (*Nos. 5, 6, 22, 23*)

The gradual change of types in the reign of Kanishka is one of the most interesting chapters of the Kushāṇa coinage. At first appears a short issue, having Greek letters and words on both sides of the coins, which bears the uniformity of the reverses of Vima and introduces four western gods: Helios, Salene (for Selene), Hephaistos and Nanaia. Then follows,[1] a new and larger issue showing a pantheon of gods belonging to the Iranian, Greek, Hinduistic and Buddhistic world, partly making use of coin-dies of the Greek issue, with legends replaced by those in Iranian language written in a form of cursive Greek letters. This must indicate a decisive turning point in the religious policy corresponding to a certain internal political situation. Thus also some forms of presentation were changed. The hitherto used Hellenistic form of Śiva was replaced by a four-armed one bearing various attributes as drum, water-vessel, trident and buck (antelope). This form must have been known in the literary works before though it is to be found in art perhaps for the first time here. Of these attributes for our investigation the buck is the most striking one. On bronze statues of later times the buck seems to be common or at least not unusual. I believe that this type should prove another or an enlarged aspect of Śiva in comparison with the more simple presentation issued by Vima who was a Śaiva himself. As we see the first type as being very similar to a Greek god, we may be allowed to look out, under the examples of the Roman coinage, for types familiar to the new presentation.

1. Göbl, *l.c.* pp. 188 ff.

Indeed we can find two examples bearing the buck as attribute of a god. Both types are unique ones, their significance in our case therefore being of much greater importance. Under Hadrian there are medallions (No. 22), which show in the reverse a naked man, Silvanus or Dionysos, going to the right and trailing a buck on his fore-legs to a lighted altar before a temple situated in a forest. Under Pius we find another comparable type, a pietas standing before a lighted altar, holding in one hand the forelegs of a buck and a bowl with fruits (No. 23). The relation is more than striking and this new presentation of Śiva pre-supposes the die-cutter's knowledge of at least one of the Roman types.

It is essential to note however that although looking at prototypes, one detects familiar and useful forms, one also accommodates these forms to one's own peculiar imagination. An absolute agreement is therefore by no means to be expected. The similarity can be a purely accidental and external one and need not be real. But despite all interpretations there remains in every case the striking parallel which excludes with maximum certainty a mere chance.

Derivable Types of Huvishka

For the coin-types of this king we have numerous examples from the Roman world. He is also the king under whose reign the types reached the greatest variety. The expansion of types and the introduction of variation is diminished under Vāsudeva I who prefers Śiva again and Ardokhsho and omits all other deities on coins represented before him.

SARAPIS (*Nos. 7, 24, 25*)

Of all the Kushāṇa types, those showing Sarapis are the clearest as nobody can deny that they came from the Alexandrian region. The native country of this god is Egypt, whence his worship came, and it must have been of such importance in the Kushāṇa empire that it was advisable to present him in the coinage[1] However, his presentation differs a little from the types shown by the Alexandrian coinage. Perhaps we have here a pattern known in Egypt itself and there realized in statues, which could have come in the form of a working-design from one of the above assumed pattern-books into the Kushāṇa empire, perhaps also as a proposed but not realized type of the Alexandrian coinage itself. The standing type (Göbl 145) is notably poor in attributes and void of

1. Göbl, *l.c.* p. 252.

expression, which may have been intended. The type corresponds as much as possible to the Alexandrian type No. 25 (of the time of Hadrian). The sitting type (Göbl 109) has no parallel in the Alexandrian coinage in respect to its frontality. Moreover the god wears a wreath in his right hand as do the typically Iranian gods Mihr and Mah. The type may have been made as an imitation of an image exhibited in an important *emporium* of the Kushāṇa empire. It is also possible to assume the existence of a sanctuary of all the gods and goddesses accredited to the Kushāṇa court, and comparable to the Pantheon presented on the coins. Such a sanctuary could have influenced the coin-types. The standing Sarapis, however, appears in the Alexandrian coinage at first under Hadrian (type dated A. D. 126-127) and this can be taken as TPQ.

NANA AS HUNTRESS (*Nos. 8, 26, 27*)

In this form, the equivalent to the lunar aspect of Diana, Nana appears for the first time under Huvishka. This is again strikingly similar to the familiar type in the Alexandrian coinage where we find it in the ninth year of Hadrian (No. 26). The type here is caused by the famous huntings of Hadrian in Asia Minor in this year. On the Kushāṇa type, however, there is a feature—the long dress (a nonsense for a huntress)—which is without significance and obviously influenced by the types of Nanaia and Vanindo. TPQ: Hadrian's time, about 125 A.D.

HERACLES (*Nos. 9, 28, 29*)

The influence of a Heracles-type on the first presentation of Śiva on Kushāṇa coins has been noted above. This type disappears under Kanishka and is replaced by the four-armed Śiva. More striking must be considered, therefore, his reappearance in the middle of the reign of Huvishka where he is accompanied by a special obverse type. The same king manifests with the help of four different reverse types the importance of this hero either for the empire or for his personal faith. I do not find the Roman republican type quoted by U. Monneret de Villard[1] quite stringent but I don't like to reject the possibility. I have not been able to find in the Imperial coinage a really corresponding type up till now, but it is interesting to find a first presentation of a total figure under Trajan (No. 28) and under Pius a whole cycle of the labours of Heracles. This we can take for the present purposes

1. *l.c.* p. 224, 2

as an approximately sure hint. TPQ: time of Pius, about 143-148.

ŚIVA WITH SEVERAL HEADS (*Nos. 10, 30*)

Śiva having more than one head appears for the first time under Huvishka. The motive of this change is difficult to find but, it could not have been an unimportant one. Looking for possibilities of comparison in the Roman imperial coinage, I was led to a very surprising result, namely to a throughout singular and unrepeated presentation of Janus (No. 30), seen on an Aureus of Hadrian[1] (No. 30). It can hardly be doubted that the appearances are parallel and that a similar-shaped god of the Roman empire provoked the familiar presentation in the Kushāṇa coinage. Naturally the Indian conception of this type has nothing to do with the Roman type and is temporarily of total independence. Probable TPQ: Hadrian 119-122.

RISHNO (*Nos. 11, 31, 52*)

As I stated already in some other place, the readings RIDH and RIOM (for ROMA)[2] are untenable. Also the reading RISHTO[3] is without paleographical proof. One must read rather RISHNO,[4] and the interpretation of this name now must be expected from the linguists and historians of religion. The type is taken from the Roman Pallas-Minerva type and not from Roma, as proved by the several examples from the time of Pius, and only here in the same attitude and establishment as shown in the Kushāṇa coinage. This, if not the best one itself, is one of the best objects for comparison for the total series. On the other hand, with the help of the paleographical evidence, all combinations, based on the interpretation as Roma, break down. They are totally speculative because as against all other gods which came from the West or were of western style, and had an anti-national or international character, Roma was national. The Dea Roma represented was that of the Roman empire in political sense. Who among Kushāṇa emperors could have allowed, even if we assume his best political relations to Rome, to accept the name of a foreign state of such importance into a coin series, even if it were only one among the gods?

1. At the Conference on the Date of Kanishka I wrongly indicated this prototype as a coin of Pius.
2. Done especially by V. Monneret de Villard, *l.c.* pp. 207 ff.
3. As given by Whitehead at the Conference 1960.
4. R. Göbl, "Zwei Neufunde in der Numismatik der Kuschan", *Mitteilungen der Osterreichischen Numismatischen Gesellschaft*, Bd. XI (XXVII a. F.) 1960, Nr. 8, 94 ff.

For the epigraphical and paleographical part of the question we possess now the key-piece in the Dinar which came to light in the famous Haughton collection.[1] The Aurei and denarii of Pius minted in his own name (No. 31) and in the name of the young Marcus are iconographically the basic types. The Haughton's coin shows besides that with maximum clearness the rough-plastic manner proper to Alexandria and very distinct too. Assumed TPQ : Hadrian, year A.D. 128.

SHAHREVAR (*Nos. 12, 33, 34*)

This god appears at first under Huvishka during the middle of his reign (Göbl 181). The type corresponds to the Ares–Mars type of Pius (No. 34) in Alexandria as well as in Rome (here with the Trajanic fore-runner No. 33). It has been noted already that Shahrēvar-Ares-Mars forms the male counterpart of Rishno. TPQ : Pius, A. D. 143-144.

Other Types of Western Origin, Indicating only General Dates

VANINDO (*Nos. 13, 35-37*)

She is shaped according to the Greek-Roman types of Nike-Victoria. My personal impression is that we should assume a prototype modelled in the manner of the second century A. D., when we find the first good' parallels in Rome and Alexandria, but the differences are such that the question cannot be solved with the help of this type. Therefore we cannot give a strict TPQ.

TRIAS OR PAIR OF GODS, TRIAS IN AEDICULA (*Nos. 14, 38-41*)

Such types in the Kushāṇa coinage are found at first under Huvishka (first half of his reign, if this expression is admissible), in every case in the earlier part of his coinage. The material of the Roman region shows a greater frequence or predilection for such types beginning with Hadrian (No. 38) where a Trias, as first comparable type, is standing in aedicula.

Other comparative types without aedicula can be added, as for example under Pius in Alexandria (No. 39). TPQ according to the best Roman parallels and the general impression would be the time of Hadrian and Pius.

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1. Cf. *Sale Catalogue*, Sotheby & Co., London, April/May 1958, No. 570.

These facts discussed above show on a synoptical table, the following picture without any manipulation :

(1) The comparison of types for Kujula and Vima rests only on singular types, whilst for Kanishka and Huvishka we have the advantage of a number of parallels.

(2) On the one hand we have special types of singular appearance which deliver approximately sure TPQ. On the other, we note types that are without any doubt derivable but appear so early and are popular during such a long period of time that they can be treated only as forming a group.

(3) From the sequence of kings and the relative correspondence between Roman and Kushāṇa types, we can fix a rough synchronism between Kujala and Augustus, Vima and Tiberius to Trajan, and between Kanishka and Huvishka on the one hand and Hadrian and Pius on the other.

Out of these, the equation Kujula-Augustus is the clearest one in spite of the fact that we do not know in which part of their reigns both emperors corresponded to each other ; in other words : the denarius-imitation of Kujula can be placed in the first or in the second half of his reign. For this event itself 29 B.C. is decisive as TPQ.

The comparison between Vima and the group of emperors from Augustus to Hadrian (commemorating the victory of Trajan) is the most extensible complex of the whole group. The interpretation as a sort of TRIVMPHVS INDICVS modelled on the pattern of Trajan is a very strong possibility, but not a certainty in the absence of any help from some other side.

The most essential element of the whole comparison forms the broader basis of comparable types of Kanishka-Huvishka with those of Hadrian-Pius. Even assuming the possibility that the one or another object of comparison only rests on an accidental agreement, the validity of the sum of types is maintained.

Even assuming that only one of the four types of Kanishka is justly comparable, we must concede that Kanishka is not possible before Hadrian, more accurately not before 128, i. e. the latest date of the TPQ of this group.

But of these four types, only two are Hadrian's types ; the other two belong to the reign of Pius. Thus we must concede as a second possibility that Kanishka cannot be placed before the first part of the reign of Pius. And

coming to Huvishka the conspectus of his types proves purely statistically that three of the eleven types are of such common nature that they must remain out of consideration at first. One of these types finds parallel in the Flavian period, two in the time of Trajan; five types belong to the time of Hadrian and five (two corresponding former ones) to Antoninian period (i. e. of Pius). If one takes this into account it points to the period from Hadrian to Pius. But because Kanishka is not earlier than Hadrian we can assume that Huvishka can only be compared with Pius. If we carry forward the dates of the first appearance of the prototypes into a table (as we have done here), then we can note that the horizon of prototypes for Kanishka and Huvishka, despite their temporal sequence between the years 128-150, runs in one line. How to explain it? At first we must neglect the prototypes of Trajan and his predecessors for Huvishka, as binding TPQ, because—as we saw—Kanishka cannot be placed before Hadrian; but we must apply those of Pius. Thus we are led to the problem of TPQ in general. According to the conclusions brought forward above we would be wrong in assuming that principally a newly appearing Roman type became efficacious immediately for the type-inventory of Kushāṇa coins. Despite the so-called coin-drift—a fact which we need not consider for our discussion—we must take into account that the imported Roman gold was preserved for some years before being issued again. During this time-span, a Roman prototype would not normally become efficacious; especially in the coinage of Huvishka, I explained the breaks in his coinage by minting-stop. The bare TPQ matters little.

The examination of the Kanishka-Huvishka types proves thus, in spite of the partly common time-line given by the Roman types, a relative sequence of Roman prototypes. It is not possible to make greater progress at the present state of our knowledge on the basis of our examination.

The Kushāṇa kings after Kanishka follow a reckoning starting with the first year of Kanishka. On account of the immediate stylistic sequence of the coins of Kanishka to those of Vima we are forced to assume that he minted already in the beginning of his reign. Therefore from the present evidence we gain the year 128 A. D. as the earliest possibility for the date of Kanishka. The length of his reign is derived from other evidences and is of no importance for this paper. Owing to the limitation of our theme we are not able to handle with the numismatic arguments derivable from the coinage before Kujula and after Vāsudeva I as well as

of the local coinages of little dynasts in India under the Kushāṇa rule. If it can be assumed as of highest probability, that the date of Huvishka corresponds to that of Pius, the date of Kanishka to that of Hadrian (late), then remains for Vima only the time of Trajan, and the time before him, and for Kujula only the time of the emperors of the first century. Out of the series of quadriga-types that we can suppose to be proto-types for the biga-type of Vima the first place has without any doubt the quadriga-type of the early Hadrian for the dead triumphant Trajan. It is therefore, much likely that the conquest of India took place at the same time as the Parthian war of Trajan. The biga type of Vima does not belong to the beginning of his reign, but at the beginning of the great gold coinage partly modelled on western patterns.[1]

1. The notes given in the text of this paper meet only the most important view-points. A great part of all thoughts presented here are already to be found in my paper on the "Münzprägung de Kuśān" etc. in Altheim's book. The special notes covring the references to the coins are to be found in the annexe to the synoptical table of types.

SYNOPTICAL TABLE

B. ROMAN IMPERIAL COINAGE	A. ALEXANDRIAN COINAGE					ROMAN TYPES					KUSHĀN TYPES
					15 AUGUSTUS R	EMPEROR SEATED ON SELLA CURULIS				1 KUJULA KADPHISES	KING SEATED ON SELLA CURULIS
	HADRIAN	TRAJAN R	18 VESPASIAN R	17 TIBERIUS R	16 AUGUSTUS & TIBERIUS R	EMPEROR ON QUADRIGA			2 V.MA KADPHISES		EMPEROR ON BIGA
PIUS						FELICITAS WITH PISTRIX		3			NANA WITH SCEPTRE
	21 HADRIAN					FORTUNA ETC. WITH CORNUCOPIAE					ARDOKHSHO WITH CORNUCOPIAE
	22 HADRIAN R					SILVANUS OR (DIONYSOS) WITH BUCK	6				SHIVA WITH BUCK
23 PIUS						PIETAS WITH BUCK					
	25 HADRIAN R		24 DOMITIAN R			SARAPIS (HELIOS SARAPIS)	7				SARAPIS
27 PIUS R	26 HADRIAN R					ARTEMIS-DIANA AS HUNTRESS	8				NANA AS HUNTRESS
29 PIUS R		28 TRAJAN R				HERAKLES	9				HERAKLES
	30 HADRIAN R					JANUS (TWO HEADS)	10				SHIVA WITH MORE THAN ONE HEAD
32 PIUS R(A)	31 HADRIAN R					PALLAS-MINERVA	11				RISHNO
34 PIUS A.R		33 TRAJAN R				ARES - MARS	12				SHARĒVAR
37 PIUS A.R		36 TRAJAN R	35 VITELLIUS A			NIKE - VICTORIA	13				VANINDO
39 PIUS A	38 HADRIAN A R					THREE GODS (OR PERSONS) IN AEDICULA	14				THREE GODS IN AEDICULA
41 PIUS A.R	40 HADRIAN R					THREE GODS (OR PERSONS)					

APPENDIX I

Notes to the Synoptical Table

Kushāṇa Type	Roman Types	Dated (*Terminus Post Quem*)
1. *NC* 1892, pl. IV (XIV), 7; *IMC*, I, pl. XI, 3.	15. *Denar*, Augustus, *BMC* 637 (East); C 116.	B.C. 29-27
	For Republic cp. *RRC* 791 a, P. Cornelius Lentulus, Rv. Jupiter on *sella curulis*.	(ca. B.C. 72)
2. Göbl 4	16. *Aureus*, Augustus pro Tiberio, *BMC* 508 (Lugdunum). C 299.	A.D. 13-14
	Aureus, *BMC* 590, 591 (East); for the very similar form of the back of the *currus triumphalis* cp.	B.C. 31-29
	especially *Denar* BMC 616 (East)	B.C. 31-29
	17. *Aureus*, Tiberius, *BMC* I; C 45	A.D. 14-15
	Aureus, *BMC* 2-6; C 47.	A.D. 15-16
	18. *Aureus*, Vespasianus, *BMC* 67.	A.D. 72-73
	Aureus, *BMC* 79; C 642	A.D. 72-73
	cp. also: *Aureus*, Vespasianus pro Tito *BMC* 510; C 393 (Antioch).	A.D. 72
	19. *Aureus*, Traianus, Strack I, 58, 61	A.D. 102-103 (107)
	Aureus, Hadrianus pro Traiano, Strack II/22; C. 585; A.D. 117 the Senat carried to the Divus Traianus the *triumphus Parthicus*. The coin shows the currus *triumphalis* with *imago Traiani*. Note expecially Strack p. 109. The use of this type already flourished in the	A.D. 117

Kushāṇa Type	Roman Types	Dated (*Terminus Post Quem*)
	earliest times of the principate. The Emperor holds always the eagle-sceptre. Strack thinks it likely that a part of quadriga-representations of the 5th consulate was minted after A.D. 103 on the occasion of the second triumph A. D. 107 newly.	
3. Göbl 23	20. *Aureus*, Pius, *BMC* 524-526 ; C 250 ; Strack III, 164 Strack notes : Ein gleichartiges Bild ist in der Reichsprägung weder früher noch später geprägt worden."	A.D. 147
4. Göbl 50,51	21. Cp. for this position of cornucopiae *Aureus*, Hadrianus, Strack II, 271 (fortuna)	(A.D. 137)
5. Göbl 30 } 6. Göbl 123 }	22. *Medallion*, Hadrianus, Cat. Bachofen v. Echt Nr. 1189 ; C 477-480	Post-A.D. 128 (cos III pp)
	23. *Denar*, Pius, *BMC* 722 *Denar*, Pius, *BMC* 735. C 616	A.D. 150-151 A.D. 150-151
7. Göbl 145 (standing)	24. Domitianus, *BMC* Alex. 284 (Helios Sarapis).	(A. D. 86)
	25. Hadrianus, *BMC* Alex. 612-614.	A. D. 126-127
[Göbl 109 (seated) is without comparison]		
8. Göbl 223 (cp. 214)	26. Hadrianus, *BMC* Alex. 586. cp. Strack's note on p. 92 on the huntings of Hadrian in Asia minor A. D. 123-125.	A. D. 125
	27. Pius, *BMC* Alex. 938.	(A.D. 142)

Kushāṇa Type	Roman Types	Dated (*Terminus Post Quem*)
9. Göbl 177	28. Traianus, *BMC* Alex. 426; cp. also U. Monneret de Villard p. 224, 2.	(A.D. 108)
	29. Pius, generally : cp. *BMC* Alex., pl. VI, pieces ranging from his 5th to his 10th year.	(A.D. 143-148)
10. Göbl 229,231	30. *Aureus*, Hadrianus, *BMC* 100; C 1070 ; *As*, Strack 601.	A.D. 119-122
11. Göbl 161 (cp. 240); Haughton Coll., Sotheby 1.5.1958, Nr. 570 = to be arranged after Göbl 191.	31. *Denar*, Hadrianus, Strack 212 ; C 295 ; *BMC* 471. Strack II, p. 129, "ein neues Bild der stehenden Athena."	A.D. 128(-132)
	32. *Aureus*, Pius *BMC* 592, C 101. *Denar*, Pius *BMC* 613, 614 ; C 594, 595.	A. D. 145 A. D. 146-147
	cp. *BMC* Alex. 939.	(A. D. 159)
12. Göbl 181	33. *Aureus*, Traianus, Strack I, 88; C 378, 379.	A. D. 107 onwards
	34. *Aureus*, Pius, *BMC* 503; cp. C 549 (imperfectly decribed).	A. D. 143-144
	BMC Alex. 1037.	A. D. 147
13. Göbl 216 onwards; cp. especially 220.	35. Vitellius (*BMC* Alex. 218).	(A. D. 69)
	36. *Denar*, Traianus, Strack I, 73 (with trophy), C 257.	A. D. 102
	37. *Denar*, Pius, *BMC* 44, 60, 61, 77 ; C 86 ; C 99.	A. D. 139
14. Göbl 101	38. *Aureus*, Hadrianus, Strack II, 89, 90 ; C 1084-1086. Aedicula generally flourishing, cp. *BMC* Alex. 537-1197 (Traianus-Pius); cp. also the single Type of Hercules, *Aureus*, Hadrian, Strack II, 87, 88.	A. D. 119, 120
	39. *Aureus*, Pius pro Faustina I., *BMC* 324 ; cp. C 261 ; Strack III, 443.	A. D. 141 onwards

Kushāṇa Type	Roman Types	Dated (*Terminus Post Quem*)
	40. *Aureus*, Hadrianus, cp. *BMC* 506, 507 (Hadrian Roma, Genius of Senate).	
	41. *Aureus*, Pius pro Faustina I. *BMC* 326 ; *BMC* Alex. 1028, 1029.	A. D. 141 onwards A. D. 148, 146

APPENDIX II

Descriptive Notes to Plate I

(The numbers correspond to those of the Synoptical Table as well as to the Plate.)

(1) AE, *IMC* I pl. XI, 3.
(15) Denarius, *BMC* 637, Coll. of the Author.
(2) Dinar, Vima Kadphises, Göbl 4 ; British Museum.
(17) Aureus, Tiberius, *BMC* 1 ; C 45 ; Coll. Trau 295.
(18) Aureus, Vespasianus, *BMC* 79, C 642 ; Coll. Trau 590.
(19) Aureus, Hadrianus (for Divus Traianus) C 585.
(3) Dinar, Kanishka, Göbl 23, British Museum.
(20) Sestertius, *BMC* 1677 standing here for the Aureus, Pius.
(4) Dinar, Kanishka, Göbl 51, British Museum.
(5) Dinar, Kanishka, Göbl 30a, British Museum.
(22) Medallion, AE, Hadrianus, C 478.
(23) Denarius, Pius, *BMC* 735.
(7) Dinar, Huvishka, Göbl 145 a, British Museum.
(24) Domitianus, *BMC* Alex. 284.
(25) Hadrianus, *BMC* Alex. 613.
(8) Dinar, Huvishka, Göbl 223 ; British Museum.
(27) Pius, *BMC* Alex. 938.
(9) Dinar, Huvishka, Göbl 177 ; British Museum.
(10) Dinar, Huvishka, Göbl 231 a, British Museum.
(30)* As, Strack II, No. 601, standing here for the Aureus, Hadrianus ; Coll. of the Author.
(11) Dinar, Huvishka, Göbl 240 ; British Museum.
(11a) Dinar, Huvishka, Coll. Haughton No. 570.
(31) Denarius, Hadrianus, C 295 ; Coll. of the Author.
(32) Aureus, Pius for Marcus, *BMC* pl. 13,5
(13) Dinar, Huvishka, Göbl 220 ; British Museum.
(37) Denarius, Hadrianus, *BMC* p. 16+.
(12) Dinar, Huvishka, Göbl 181 ; British Museum.
(34) Aureus, Pius, Strack I, No. 88 ; British Museum.
(34) Pius, *BMC* Alex. 1037.
(14) Dinar, Huvishka, Göbl 101 a ; Coll. White King No. 420 (Schulman).
(38) Aureus, Hadrianus. C 1085 ;
(39) Aureus, Pius for Faustina I., *BMC* 324.
(41) Pius *BMC* Alex. 1109 (Photograph cut up).

A UNIQUE GOLD AND TWO SILVER COINS OF HUVISHKA

A. K. NARAIN

[Pl. II]

In 1959 I visited most of the museums of Europe and made a general survey of their collection of Indian coins, particularly the pre-Mohammadan series. I prepared a rough inventory of most of the collections with a view to publishing it in the form of a monograph sometime later. From some of the museums I have been fortunate to get photographs and plaster casts of new and rare coins. I take this opportunity to publish a unique gold and two silver coins of Huvishka from the Munich and Berlin museums respectively.[1]

A Unique Gold Coin of Huvishka

The coin described below belongs to the Staathiche Münzsammlung, Munich.

AV. Stater[2].

Obverse : Three-quarter length bust of king to r. on clouds, nimbate. He wears a turban with which are attached streamers and a flying animal (?). He has beard and full grown whiskers and moustaches. He is wearing a coat of mail with cloak and a necklace. He holds a kind of sceptre in his r. hand and a standard bound with fillet and surmounted by a bird (?) facing to r. in l. hand.

Legend : ÞAONANOÞAO OOhÞKIKQÞANO

Reverse : Standing figure of the deity to r. nimbate, holding a standard bound with fillet in r. hand and fire in l.

Legend in l. field : ΦΑΡΡΟ

In r. field monogram :

(Pl. II. 1) **Enlarged obverse (Pl. II. 1A.)**

1. I am very thankful to Dr. H. Küthmann of the Staatliche Münzsammlung, Munich and Prof. A. Sühle of the State Museum, Berlin, for not only having allowed me to publish their material but also for providing beautiful photographs and plaster casts of the coins published here. I take this opportunity to thank also Dr. Jaeckel of Munich Coin-cabinet and Dr. Weschke and the other colleagues of Professor Sühle in the Berlin Museum for their hospitality and help.
2. I am sorry I have misplaced my note of the exact weight of the coin.

The coin is most beautiful and unique to the best of my knowledge. Allen H. Wood, who has made a thorough survey of the gold coins of the Great Kushāṇas has rightly remarked that Huvishka issued as many or more coins in volume and definitely more coin-types than the combined issues of Vima Kadphises, Kanishka and Vāsudeva I.[1] The coins of Huvishka are notable for the variety of delineation of the deities on the reverse; one and the same deity has been shown in different positions and with different attributes. Ardoksho is shown in 9 forms, Mao in 11, Miiro in 21, Nana in 14 and Farro in 18 forms.[2] Similarly the obverse forms are no less remarkable for their variety. Allen Wood has listed eight obverse types.[3]

Our coin offers a new obverse type inasmuch as it shows for the first time the king wearing a turban and unlike all, except one type of Huvishka, here the king is to r. The turban anticipates easily of the Mughal emperor Jehangir who wears a somewhat similar turban on his coins.[4] It is interesting to note that both the Kushāṇas and the Mughals had connections with Central Asia.

On most of the obverse types the king is shown clean shaven. On the present type he has grown a beard and has well groomed moustaches and whiskers. From a comparison of the busts of Huvishka it seems that this coin was issued late in his reign.[5]

I cannot help noting a flying animal (?), which seems to be attached to the streamers behind the head. Is it a lion ? I do not know what explanation can be offered for its presence. But Whitehead describes one coin of Huvishka where the king, according to him, holds a lion-standard.[6] Was lion associated in any way with the royal emblem?[7]

The legend on the obverse shows that the coin falls in the group which has OOESHKI instead of OOESHKO as

1. *N.N.M.* 9 'The Gold Coin-Types of the Great Kushāṇas' p. 12.
2. Ibid. pp. 15-36
3. Ibid. pp. 12-15
4. *B.M.C. Moghul Emperors* pl IX Of course I do not mean that the two turbans are exactly similar.
5. See Padma A. Altekar, *J.N.S.I.* XIV., pp. 62 ff. and pl VI.
6. *P.M.C.* p 196 No. 125 Pl. XVIII. 125.
7. The goddess Nana is sometimes shown seated on a lion, viz, *P.M.C.* pl. XX. x. The Kushano-Sassanian Hormazd II wore a lion-headdress (viz. *P.M.C.* p. 213, pl. XX. 240). But the Kushāṇas are never shown wearing this head-dress.

the name of the king.[1] It is interesting to note that in the coins bearing the name Kanishka also there are two varieties: KANESHKI and KANESHKO.[2] The group which has KANESHKO is definitely later and is generally taken to be the issues of a Kanishka II or III.[3] The abundant issue of the gold coins of Huvishka, the varieties of obverse and reverse types quite unusual for a single king of the Kushāṇa lineage and, the problem of the Kanishka of Ara inscription[4] often lead us to feel the necessity of a second Huvishka. F. W. Thomas and Allan have expressed the opinion that the possibility of two Huvishkas cannot be ruled out.[5] I am myself engaged in classifying the Huvishka coins in two series. Could it not be that the coins with OOESHKI are the issues of one and those with OOESHKO that of the second Huvishka? In that case, quite in the fitness of things, this beautiful coin would belong to Huvishka I.

Two Silver Coins of Huvishka

One has to think twice before publishing Kushāṇa silver coins. The Kushāṇas are generally not supposed to have issued silver money. A few coins, which have been published are looked either with suspicion or an explanation is sought for them. A silver coin of Vima Kadphises, with Nana and Oesho on the reverse and weighing 40 grains, which first figured in *Ariana Antiqua* in 1841 was described and illustrated in *BMC*.[6] Cunningham suggested that this piece was intended for the equivalent of silver denarius.[7] Whitehead is inclined to regard it in the nature of a proof piece.[8] A silver coin of Kanishka, of the Indian Museum Calcutta, having Oesho on reverse was published in *ASI. AR*, 1925-26.[9] One coin of Huvishka with Oesho and Nana on the reverse belonging to the Bombay Branch of the Royal Asiatic Society

1. Out of eight obverse types listed by Allen Wood, only one, i.e. VI has the legend OOIIÞKO. It is significant that it occurs only on some coins of the Nana reverse type (see *BMC*, XXVIII. 10).
2. On the coins of Kanishka I the name is always written as KANIIÞKI. It is only later coins with stray Brahmi letters that give KANIIÞKO. (*PMC* p. 211, pl. XIV, 231)
3. The KANIIÞKO coins are supposed to be later than Vāsudeva I and are grouped under 'Later Kushāṇa' series.
4. *Select Inscriptions* p 149; *Corpus Inscriptionum Indicarum*, Vol. II. pt. 1 p. 165.
5. *JRAS*. 1952. pp. 108 ff.
6. *BMC. Greek and Scythic Kings.*, pl. XXV. 1
7. *Num. Chron.* 1892, p. 70.
8. *PMC.* p. 174.
9. *ASI. AR.* 1925-26., p. pl. LX. f.

was published by K. N. Dikshit.[1] Altekar doubted the genuineness of the BM and the Indian Museum coins.[2] But whatever may be the nature or purpose of these issues at least the BM coin does not seem to be a forgery on examination. I have not been able to check others.

A silver coin having half-length figure of Huvishka on the obverse and Sun-god on the reverse, was also published by M. B. L. Dar[3] **(See Pl. II. 4)** and, later twelve silver coins belonging to Vima, Kanishka, Huvishka and Kaneshko were published by A. S. Altekar.[4] But all these thirteen coins appear to be forgeries from moulds.[5]

The two silver coins of Huvishka which are described below are in the State Museum of Berlin.

AR. Wt. 2.03 and 2.07 grammes (=about 32 grains) ↑.

***Obverse*:** Three-quarter length figure of king to l., wearing a crested helmet holding a sort of sceptre in r. hand and an indistinct object (ankus ?) in l. hand.

Legend : l. Kharoshthi letters (from VII to XI): (—?) *sha* (—?) *ta ta ya sa* (?)
r. (from XII to V) (O) OhÞKI KOÞoИ (O)

***Reverse*:** Two deities facing one another standing on a pedestal and between them monogram Attributes of the deities are not distinct.

Legend : l. NAN (A) r. OKPO

(Pl. II, 2-3) **Enlarged : (Pl. 2A-3A)**

These coins are without any doubt genuine silver coins. They are of the same type as the *PMC* one but are from different dies than the latter[6] and, in fact, show a variety in the delineation of the obverse figure.

1. *JBBRAS*, vol. XXIV, p. 384 and pl.
2. See Altekar, *JNSI*, vol. XIV, p. 40. He considers them forgeries from moulds and according to him they show absence of sharpness of details. But this is true of the forged coins published by Altekar and the one by M. B. L. Dar; I do not think it holds good for all. Altekar has also called *PMC* No. 135 (Pl. XVIII) as a silver coin and declares it to be a forgery but Whitehead has listed the coin as gold ! I do not know how and why Altekar called it silver.
3. *JNSI*, vol. II, p. 113, pl. X. 7.
4. Altekar, op. cit., pp. 34-40.
5. Ibid., p. 40. I have no doubt about these being forged from moulds.
6. Cp. *PMC*, pl. XVIII. 135

But the most important feature of these coins is the occurrence of at least 7 Kharoshthi letters from VII to XI o'clock; there may (or may not) be another letter at about XII. Except two, all the letters are fairly readable a (?) *sha* (?) *tatayasa*. Unfortunately it does not give any sense to me at the moment. The letter after *sha* is indeed too peculiar to be even Kharoshthi; perhaps the engraver who was used to engrave Kushāṇa form of Greek letters smuggled on these coins Δ of the latter group by mistake in what was meant to be a Kharoshthi legend. The last four letters could be read as *tatayasa*; the final choice can be made only after the first three letters give a sensible reading. Attention may be here drawn to a copper coin which Cunningham thought to be a bilingual issue of Huvishka.[1] Be that as it may, these two silver coins of the Berlin Museum definitely have some Kharoshthi letters and therefore are the only clear bilingual issues of the Kanishka group of kings. These coins are thus not only important as silver coins but also as bilingual issues of Huvishka.

It is indeed one of the standing problems of Indian numismatics that before Vima Kadphises silver money was so popular that we meet with gold coins very rarely, whether struck by the kings of the foreign origin or by local kings. And, in Kushāṇa and the succeeding Gupta series of coinage it is just the other way round; gold is the popular medium for striking coins and silver is hardly to be met with. It is all the more surprising because roughly during the same period the Śaka kings of Ujjain strike only in silver and the Sātavāhanas mostly in lead, potin and rarely in silver. The general explanation is that the punch-marked coins were already circulating in the market in such large numbers down to the Gupta period that the need of silver money was not felt. This may be partly the reason but certainly we must look into certain economic factors affecting trade and supply of silver for the real explanation of this phenomena. After all the punch-marked coins were circulating also in the Indo-Greek period but that factor did not stop the Indo-Greeks to issue silver; on the contrary, they have struck an unusually large volume of silver. A deeper study of Roman contacts and India's trade relations with the Western countries along with an analysis of internal and external sources of silver and gold have to be made before a satisfactory answer to this problem can be given.

1. *Num. Chron.*, 1892, p. 82.

NOTES ON GEM-SEALS WITH KUSHĀṆA CURSIVE INSCRIPTIONS IN THE COLLECTION OF THE STATE HERMITAGE

B. J. STAVISKY

[Pl. III]

At the Oriental Department of the State Hermitage, there is a set of gem-seals with inscriptions in the so-called Kushāṇa (or "Tokharian") cursive script.

Similar objects in general are not numerous. Except the Hermitage Collection, I know of only 15 such seals (or their impressions) scattered among different museums and private collections:[1] two are in Calcutta Museum[2], one in Peshawar Museum[3], two in Kabul Museum[4], three in British Museum[5], one in Ashmolean Museum, Oxford[6], one in Berlin

1. A. Maricq includes 13 of them in the list of "Tokharian" inscription. See his article "la grande inscription de Kanishka et l'etéo-tokharien, l'ancienne langue de la Bactriane", *Journal Asiatique*, t. CCXVI, fasc. 4 1958, pp. 419-420.

   It is worth mentioning that an impression (section IV, N 6) of one of the documents from Mt. Mugh (Institute of Orientalistics of the Academy of Sciences of the USSR) is not a "Tokharian" but a Sogdian one; see B. A. Livshitz, '*Sogdii skii dokument* B-4 c. *gory Mug, Problemy Rosto Kove lenija* 1959, No. 6, pp. 124-129.

2. R. Ghirshman, "Quelques intailles du Musée de Calcutta à légendes en Tokharien. Pehlvi Arsakide et Pehlvi Sassanide", *Archaeological Orientalia in memoriam Ernst Herzfeld*, N.Y. 1952, pp. 102-105, pl. XXI, 1-2 (according to Maricq Nos 1-5)—seals with the legends OŠGOSO and AUXRAMSTABAGO (material and size of the seals are not indicated).

3. A. D. H. Bivar, Notes on Kushana Cursive Seal Inscriptions, *Numismatic Chronicle*, XV, No. XV, 1955, p. 209, pl. XV, 3 (according to Maricq—No 3) impressions of the seal with the legend BANA VA.

4. (i) A.D H. Bivar, op. cit., i i., p. 293, pl. XV, 4 (according to Maricq—No. 1) the impressions of the seal with the legend MOHO NATO (?) ; (ii) R. Ghirshman, *Les Chionites—Hephthalites*, Cairo, 1948, p. 58, pl. VII, 3 (according to Maricq-No. 8)—three impressions on the clay vessel with the inscription VARAHRAMO

5. (i) A.D H. Bivar, op. cit. pp. 209-210, pl. XV. 5 (according to Maricq— No. 8). Chalcedony seal with unread legend; (ii) (A. Cunningham, Later Indo-Skythians, *Numismatic Chronicle*. v. XIII, 1893, p. 126 and pl. X, 1 ; R. Ghirshman, *Les Chionites-Hephthalites*, p. 54, pl. VII, 2 (according to Maricq—No. 12) – the crystal seal with the legend ŚANIA (from A. Cunningham collection) ; (iii) A. Stein, *Ancient Khotan*, v. I, p. 220; v. II, pl. XLIX, Oxford, 1907, carbuncle seal.

6. A.D.H. Bivar, op. cit, ii., pp. 203-207. pl. XV, 1 (according to Maricq- No. 7) a seal impression with two-lined inscription in which Bivar reads as "son of great Kanishka". This reading as well as dating of the seal are doubtful.

Museum[1], one in E. T. Newell Collection[2]; two intaglios known to have belonged earlier to A. Cunningham Collection,[3] and two seals are from some unmentioned collections.[4]

At the Hermitage there are four such seals :

(1) Amethyst sealing of unknown origin. 2 x 1, 7 cm. The original was lost during the World War II. At the Oriental Department of the Hermitage now there remain only its impressions and photos. The intaglio is elliptical, plano-convex with an engraved male bust ; fronting breast and shoulders, the head turned three quaters to right. The face is long and narrow with a straight nose ; long hair arranged in locks falling down to shoulders ; neatly trimmed and curled beard ; ball-line earrings and a necklace with a pendant in the middle ; light robe with fanlike folds. Right and left running around the head from the right shoulder is an inscription GOROHRONO ŠOHROBO. **(Pl. III. 1,1a)**

(2) Almandine seal (No. GL. 1208)[6] from N. F. Petrovsky collection. 2 x 1, 5 cm. An oval plate with a male bust ; on a strongly convex obverse, face in profile, the breast and shoulders turned three quarters to right, long beardless face with drooping moustaches as if bisected at the end ; long straight nose, well cut nostrils ; large eyes with marked pupils ; rather narrow retreating forehead ; on the shortly cut locks—a small round cap decorated with bunch of flowers (?) ; an earring is but slightly discernible ; on the neck—a collar of a light dress is clearly seen ; the plaits of

1. P. Horn und G. Steindorff, *Sassanidische Siegelsteine*, Berlin, 1891. p. 21. pl. VI, 1620. Cf. R. Ghirshman, *Quelques intailles du Musée de Calcutta*, p. 106–the Sarder seal with the inscription AURAMAZDA.

2. (i) A. Cunningham, op. cit. pp 121-127, pl X, 2; E. Herzfeld, *Kushano-Sasanian Coins*, Calcutta 1930, p. 16 ; R. Ghirshman, *Les Chionites-Hephthalites* pp. 55-58 ; pl. VII, I (according to Maricq-No. 13) a nicolo seal with the inscription arranged in two lines ; (ii) A. Cunningham, op. cit., p 181, pl. XIII, 11 : R. Ghirshman, op. cit , pp. 54-55 (according to Maricq-No. 14) an amethyst with the inscription BAGOZHIONO(?)

3. R. Ghirshman, "Une intaille Hephthalite de la Collection de Mrs. Newell", *Numismatic Chronicle*, V. XII, No XLIII, 1953, pp 123-124 ; A. D. H. Bivar, op, cit, pp. 207-209, pl. XV, 2 (according to Maricq—No. 15)—a lapis-lazuli seal with the inscription HUZINA.

4. R. B. Whitehead, Notes on Indo-Greeks III, *Numismatic Chronicle*, v. X, No. XXXIX -XL, 1950, pp 231-232 (According to Maricq-Nos. 16 and 17) an amethyst seal with the inscription BIZANO and Roman gem with Kushāṇa legend KALOKARO (?) (material and size of the seal are not indicated).

5. See K. V. Trever, "Reznoy ametist iz Sobraniya Ermitazha," *Soobshcheniya Gosudarstvennoi Akademii Istorii Materialnoi Kultury*, (GAIMK), 1931, No. 2 pp. 19-23

6. Published by the author in *Soobsheheniya Gosudarst Vennogo Ermitazha, By puck xxi.*

the robe are represented in the shape of a "fir-tree" ornament. Below the portrait—two dispersed branches ; in front of the face a cursive inscription of nine letters OSBOROBOO. Behind the head a symbol (tamgha). **(Pl. III 2, 2a)**

(3) Sealing of two coloured cornelian (No. GL 1258) also from N. F. Petrovsky collection. 1, 4 x 1, 3 cm., oval plano-convex with an engraved male bust; face in profile, fronting breast and shoulders ; the head of mezochranian type with narrow retreating forehead and long straight nose ; large eyes with marked pupils ; long thin moustaches ; straight hair rolled around the face ; the ear is jewelled, the breast and shoulders in the shape of four "lobes", light foldless garment with a big round collar ; around the head, beginning from the right shoulder, a cursive inscription HOZORO XN (T?) O. **(Pl. III 3, 3a)**

(4) Sardonix seal (No. GL 503) bought from B. N. Kastalsky ;[2] oval, on the flat facial side—a fronting bust, the reverse of the intaglio is slightly convex ; long and narrow face ; small mouth placed close to straight long nose ; round eyes with marked pupils ; straight hair standing on end ; narrow sloping shoulders ; the dress with a round collar is covered with conventionally treated folds in the form of sticks vertical in the centre and inclined at the sides. Left and right of the head—symbols in the shape of a half-moon, ends upwards, and a circle under the bar ; above the head—a cursive inscription SANA. **(Pl. III 4, 4a)**

The seals from the Hermitage belong to four different groups of Oriental glyptics :

I. The cut amethyst is closely related to the early Sassanian seals. The stylistical peculiarities of representation (locks falling down to shoulders, modelling of the face and treatment of the beard and moustaches) establish points of similarity with a large group of Sassanian cut stones (mostly

1. N. F. Petrovsky (1837-1907)—a well-known connoisseur of Central Asiatic antiquities. He was specially interested in questions of cultural connections with India. Military by profession, many years he was a consulate in Kashgar. Retired in 1904 and settled in Tashkent where he lived till the end of his days. Considerable part of his collection is now at the State Hermitage ; the East Turkestan, Indian and other manuscripts are now at the Institute of Orientalists of the Academy of Sciences of the USSR (Leningrad).

2. B. N. Kastalsky—a military engineer, specialist in irrigation of Central Asia. Since 1907 he had been an active member of the Turkestan Society of Amateurs of the Archaeology. He was the owner of a most valuable collection of antiquities from Central Asia, which he had collected during his numerous trips into different regions of Modern Soviet Central Asia. He died in 1943 in Samarkand. His collection is partly at the Hermitage, and partly at the Samarkand Museum.

cut amethyst) of the third or early fourth century A.D. Such are gems with the portraits of Ruvanan visit, the queen of queens Denak, Hormard Waraz (Hermitage), Narse, Tiridat, Artashir I, of some "mistress" (British Museum), Varahran (Duke of Devonshire collection) and some other seals with the inscriptions in Arshakid (Pahlavi) or Sassanian (Parsic) script.[1]

Thirty years ago, K. V. Trever read the inscription as VARAHRANO ŚAH RABBA—"Varahran—great king" (considering rabba as an Aramean ideogram instead of the Iranian *vuzurk*-"*great*"). She believed that the seal belonged to Varahran I, when he had been viceroy (Kushanshah) in the East and heir to Hormizd I.[2] However, the rendering of the Aramean ideogram by the Kushāṇa lettering seems hardly probable. The inscription is likely to be read as VARAHRANO ŚAHRABO—"Varahrano-satrap" regarding *ˇahrabo* as the middle-Persian *ˇsahrab* faithfully represented by the Kushāṇa script.[3]

A close relation of this seal to the early Sassanian group of gems of the third or the beginning of the fourth century A.D. seems to be an established fact. Most likely this seal was in the possession of some Sassanian prince of the Kushāṇa dominions conquered by the Persians.

II. The almandine seal belongs to the group which may be named as "Chionite". It includes three kinds of seals. The first one contains three gems: one from A. Cunningham collection (now it is in the British Museum),[4] the second is from E. T. Newell collection and the third (the gem in question) is from the Hermitage. On all these seals are engraved similar male portraits, with long drooping moustaches; they are represented in the same attitude (face in profile, bust and shoulders—three quarters to right); similarly treated hair and the same light robe ornamented with the folds in the shape of "fir-tree" branches (R. Ghirshman calls this ornament an "*arrete de poisson*"); in front of the face a cursive Kushāṇa legend; on two seals (one from Newell collection and one from the Hermitage) behind the head there are

1. See B. G. Lukonin, "Reznoy ametist s izobrazheniem 'tsari tsy tsarits', Denak" *Issledovaniya po istorii Kultury Narodov Bostoka (Sbornik v che st' akademika I. A. Orbeli)* M -L., 1960, pp. 376-85.
2. K. V. Trever, op. cit, pp. 19-21.
3. About the term Śaharaβ, see J. Harmatta, "Die Partischen Ostraca aus Dura Europos", *Acta Antiqua.* Budapest, t. VI. No. 1-2, 1958. pp 166-168.
4. See n. 5 (ii). Basing himself on the Palæographic data, R. Ghirshman refers this seal to the fifth-sixth centuries A.D. However, as the palæography of the Kushāṇa cursive script is almost unknown, it is difficult to fix the material on palæographical data.
5. See n. 9.

similar symbols ('tamgha') analogous to those called "Hephthalite symbols"; on the Hermitage gem we find the same sign only turned upside down (on the seal from A. Cunningham collection there is an inscription in Brahmi instead).[1]

Evidently, the patrimonial signs (tamgha) on the seals of this group are not to be regarded as a definite symbol of the Hephthalite kings. Such symbols do not occur on the coins belonging to the heyday of the Hephthalite Empire (fifth–early sixth centuries A.D.) but only on the specimens of the so-called "Chionite" or (since we admit the identification of the Chionites with the Hephthalites) early Hephthalite specimens: on the coins of Cataulph I and those of Haptala I, ruling in the second half of the fourth century A.D. (according to R. Ghirshman's classification)[2]; on the coins of the fifth century, this symbol is not to be found; 'tamgha' is wholly absent on the coins of Haptala II and Acun; on the issue of Haptala III it is somewhat modified.[3] Thus, it appears that at present the group of intaglios described above may be classified as "Chionite" or "early Hephthalite" and the gems respectively as Chionite, or early Hephthalite seals of late fourth or early fifth centuries A.D.[4]

Reading of legends on the seals of this group in general presents great difficulties. Each inscription consists only of one word and it is likely enough that this word represents the name of the owner of the seal. Since the Chionite-Hephthalite onomastics is almost unknown, the deciphering of these inscriptions is quite hypothetic. The legend on the Hermitage gem can be provisionally read as ASPURABAX–

1. Besides the gems described as belonging to the Chionite group, we may include three seals of another type into it. On one of the seals from Peshawar Museum, an engraved personage resembling the busts of the described group of seals is fore-shortened otherwise; the Kushana legend representing the name of the owner as if changed places with the 'tamgha'.

The second seal, the property of General H. L Haughton, exhibits a dancing Silenus holding a stag-headed rhyton in her right hand and a Hephthalite symbol of the surface (see R B. Whitehead, op. cit, p. 232). The third object, closely connected with Haughton seal, is unpublished gem from the Hermitage. In this gem is cut similar man and devanagari legend, but the sign is absent.

Similar shape of stone (an oval plate with strongly convex) and high quality of engraving are also typical of all gems of the group in question.

2. R. Ghirshman, *Les Chionites-Hephthalites*, pp. 19-20.
3. R. Ghirshman, op. cit, pp. 19-20.
4. The legend on the unpublished Hermitage seal (see n. 20) also supports this date. As Mrs. T. V. Grek has most kindly informed me, this legend, according to the palæographical data, may be referred to the period about the middle of the fourth century A.D.

Aspurabah, the name which finds analogy in some Iranian languages.[1] It is worth calling attention to the fact that the name of the owner from the seal of Newell collection (in style and mode of engraving, it is closely connected with the Hermitage gem) Huzina also may be explained as an Iranian one.

III. The Sardonix sealing of the Hermitage collection belongs to a rare group of cut stones consisting now of only three gems. The engraving on the seals bears a striking resemblance to the representation on the seal impression from Kabul Museum[3] and on one of the seals from Calcutta Museum :[4] on all these seals are cut male portraits very much alike in appearance, attitude and also in the treatment of face, hair and garment.

The inscription on the impression of Kabul Museum seal is in cursive Kushāṇa script while the legend on the Calcutta seal—in Sassanian (Parsic) letters. Unfortunately a satisfactory reading of both these legends is not possible at present. The inscription on the Hermitage sealing HOZORO XN(T?)O is identical to the last two words of the inscription on the convex Chalcedony seal from the British Museum,[5] but reading of these two words suggested by A. D. H. Bivar is rather tentative and shaky. Thus, the legends on the seals of this group need further investigation. It is worth observing that the inscription on the Hermitage gem and the termination of the legend on Chalcedony seal of the British Museum are identical not only in their content but also in the palæography.

However, we do not know how long was the period during which the Kushāṇa palæography changed, and therefore, dating seals on the basis of palæographical data seems somewhat premature. It is extremely significant that R. Ghirshman, dating the amethyst seal (A. Cunningham collection) by the palæographical material of the sixth century A.D., marks also the identity of the symbol cut on this seal with the 'tamgha' of Bahram, the Kushāṇo-Sassanian prince ruling in the middle of the fourth century A.D.,[6] and the crystal seal which stylistically has affinities with the gems of "Chionite"

1. V. A. Livshitz most kindly provided me with an etymology of this name : "possessing the whole portion."

2. A. D. H. Bivar, op. cit., p. 208.

3. See n. 4 (i).

4. R. Ghirshman, *Quelques intailles du Musée de Calcutta*, p. 115, pl. XXI, 9.

5. See n. (5) (i).

6. R. Ghirshman, *Les Chionites-Hephthalites*, p. 55.

group (second half of the fourth to early fifth century A.D.), he refers to the fifth or sixth century A.D.[1]

Therefore although the Chalcedony seal of British Museum may be dated in the fourth century A.D.[2] the question concerning the time of the cutting of the Hermitage gem and other seals of the group described above cannot be finally solved at the present state of our knowledge.

IV. The engraving and the shape of the stone place the Chalcedony seal in a different group than the gems with the Kushāṇa or "Tokharian" inscriptions.

Apparently, it belongs to some separate group of seals. Since the sketchy representation in general and the manner of treating the folds in particular are typical of the late seals (fifth to eighth centuries A. D.), the sardonix seal may be referred to Hephthalite or possibly even to the Turkisk period.[3]

1. See n. 18.

2. See A. D. H. Bivar, op. cit , p. 210.

3. In writing this article, I have profited greatly from discussions with Mrs. T. V. Grek, Mr. V. A. Livshitz and Mr. V. G. Lukonin and I am much indebted to them.

THE PROTOTYPE OF AN OBVERSE DEVICE OF KUSHĀṆA COINAGE

BRATINDRA NATH MUKHERJEE

[Pl. IV]

'The King standing to his right and offering something on an altar' is a familiar obverse device of the coinage of the Kushāṇas.[1] This was even copied on the earlier issues of the Imperial Guptas.[2] No serious attempt has so far been made to find out the origin of such a popular coin-device. An attempt will be made here to find out its prototype.

It is well known that the device in question appeared for the first time in the Kushāṇa series as an obverse type on certain coins of Vima Kadphises.[3] The appearance of King on these coins may be described as follows:

> "King standing to l., wearing peaked helmet, diadems with flowing ends, long heavy coat reaching below his knees, long trousers and heavy boots; and offering with his r. hand something over a small altar." **(Pl. IV. 4)**

A search for the prototype of this device among the issues of contemporary dynasties reveals that similar types really occur on certain coins of the Parthian royal family. Attention may be drawn to certain coins published by W. Wroth[4].

These coins can be described as follows:

Obverse—Bust of King; border of dots.

Reverse—Male figure wearing short tunic; standing to r.; holding in his r. hand something over an altar; in field, over the altar, a crescent; oblong border of dots.

(Pl. IV. 1 & 2 and 1 A & 2 A)

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1. R. B. Whitehead, *Catalogue of Coins in the Provincial Museum, Lahore*, Vol. I, pl. XVII-XX.
2. J. Allan, *British Museum Catalogue of the coins of the Gupta Dynasties and of Śaśāṅka, King of Gauḍa*, pl. I & II.
3. P. Gardner, *Catalogue of the coins of the Greek and Scythic Kings of Bactria and India in the British Museum*, pl. XXV, no. 11-14; A. Cunningham, *Coins of the Kushānas*, pl. III, *Numismatic Chronicle*, Vol XII, pl. V, no. 9, 11-13; V. A. Smith, *Catalogue, of the Coins in the Indian Museum, Calcutta*, Vol, I, pl. XI, no. 7; *PMC*, Vol. I, pl. XVII, no. 36.
4. W. Wroth, *A Catalogue of Greek Coins in the British Museum—Catalogue of the Coins of Parthia*, pl. XXIX, nos. 9 & 10, pl. XXVII, no. 21.

This reverse type occurs on certain coins belonging to the later group of Volagases I's issues. They were issued in or after A. D. 60.[1]

Another type, similar to that of Kadphises II, occurs on certain coins of the Parthian King Gotarzes, who ruled from A. D. 40/41 to 51. The relevant type has been published by Wroth[2] which can be described as follows :

Obverse—Bust of Gotarzss ; border of dots.

Reverse—King wearing hemlet, diadems with flowing ends, long trousers, heavy garments reaching below his kness and probably heavy boots ; standing to his r.[3] ; offering with his r. hand something on a small altar ; circular borders of dots. **(Pl. IV. 3 and 3A)**

Of the two Parthian reverse types, described above, that occuring on the coins of Gotarzes is more similar to the Kushāṇa coin device in question. In both the cases, however, the king wears helmet, diadems with flowing ends and heavy garments, stands to his right, and offers with his right hand something on a small altar. On the other hand, the male figure on the coins of Volagases I wears short tunic and is shorn of kingly attributes like diadems etc. This figure does not appear to be a representation of a king.[4]

Thus there cannot be any doubt about the similarity between the devices of Gotarzes and Vima. One must have followed the other. As Gotarzes, the only Parthian king to use the device in question, ruled from A.D. 40/41 to 51, and as Vima could well be placed in the middle of the 1st century A. D., it was possible for each of them to follow the type of the other.

In ancient East, one monarch used to copy the coin device of a contemporary enemy king generally on

1. **Ibid., p. 1.**
2. ***BMC. Parthia,*** **Pl. XXVII. 21.**
3. **Wroth was definitely wrong when he described the King as "standing facing, looking left" (*BMC, Parthia,* p. 172). The standing pesture of the king on these coins is absolutely similar to that of the monarch on Vima's species, mentioned above. Wroth's descriptions of coins, sometimes faulty as they are, have not been strictly followed in the present paper.**
4. **On the reverse side of a class of coins of Artabanus III (A.D. 10/11—40) appears a male figure standing to his right and holding patera over an altar (Wroth, op. cit, pl. XXV, no. 10). But as this figure is naked and has wings, it cannot possibly be the representation of a king. Hence its case has not been considered here. It may be a representation of Eros.**

two occasions; either to commemorate a victory over the enemy king, or when issuing coins in a region which formerly had been under the rule of the enemy's family and where enemy's coins containing the device concerned had been in circulation.[1]

Gotarzes is not known to have defeated the Kushāṇas. Nor is he known to have annexed to his dominion any territory, which formerly had been under the Kushāṇas and where Vima's coins containing the device in question might have been in circulation. Actually, Gotarzes had to face several internal troubles;[2] and it was almost impossible for him to conquer any Kushāṇa territory.

On the other hand, archaelogical finds indicate that the Kushāṇas expanded their dominion upto the modern Toprak-Kala region lying to the north of the Oxus.[3] As Vima's coins have been found in this area,[4] it is not impossible that this Kushāṇa ruler expanded his dominion up to this region.[5] If he did, he must have conquered some portions of the Parthian empire lying between his original territory and the Oxus. He might have defeated Gotarzes and commemorated this victory by copying a type of the latter. It is also possible that Vima conquered a territory when Gotarzes' coins containing the device in question had been in circulation: he copied the type concerned after coming in contact with them.

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1. Sometimes kings copied devices of older dynasties and even of contemporary ruling classes. In these cases the species bearing the prototype were either internationally important or had been in circulation from a previous age in the dominions of the imitating Kings, or both. Thus Roman coin-devices were copied by the Kushāṇas. But these things cannot be considered in our case, for Parthian coins had no great international importance. Nor Kushāṇa coins, in the time of Vima, had free circulation in the Parthian dominion. The feasibility of happening of the opposite case is also very meagre.

   Sometimes again a feudatory ruler imitated the coin devices of of his overlord. But, of Vima and Gotarzes, none is known to have been a feudatory of the other.

2. Wroth, op. cit. p. LVI—II.

3. See S. P. Tolstov's article in *The Modern Review*, December, 1953.

4. This information is derived from a paper of S. P. Tolstov. It was submitted for discussion in the seminar on the 'Date of Kanishka', recently held under the auspices of the School of Oriental & African Studies, London.

5. In an article, recently published in *Indian Studies-Past and Present* (Vol. I, no. 4), the author of the present paper observed that Kanishka might have conquered Toprak-Kala region. But the numismatic evidence, mentioned in reference no. 11, may indicate Vima's authority over this area.

Thus we can conclude that Vima copied the device under discussion from a type of Gotarzes. This shows the origin of a device which was very popular with the Kushāṇas. As noted earlier it also influenced the Gupta Coinage.

Incidentally, our conclusion throws some light on the question of the date of Kadphises II. As he copied a device of Gotarzes, who ruled continuously from A. D. 40/41 to 51, a part of Vima's career must be placed after A. D. 40/41.

NOTES ON ŚAKA-SĀTAVĀHANA COINS

V. V. MIRASHI

[Pl. IV]

Coins of Western Kshatrapas

Coins of the Western Kshatrapas have been found from time to time in Vidarbha. A large hoard of 670 coins was found at Sonpur in Chhindwara District of Madhya Pradesh in 1925. It has been described by Shri G. V. Acharya in the Numismatic Supplement No. XLVII, (1937) (*JRASB*, Vol. III), pp 95 N. f. Stray Kshatrapa coins have been picked up at several places such as Ārvī (Wardhā District) and Keolāri and Seonī (Seonī District).[1] Recently two large hoards of Kshatrapa coins are said to have been found at Bāsim (Akolā District) and Kuṇḍinpur (Wardhā District). Some coins from these two hoards have reached me, but the rest have either been melted or distributed, causing irreparable loss of historical knowledge. A few days back another coin was shown to me by Shri Vishnukumar Dongaonkar, a student of the Nagpur Mahavidyalaya, which had been picked up at Kāranja in the Akolā District of Vidarbha. As shown below, it is of the Western Kshatrapa king Rudrasena II. I publish it here and also another coin of the same Kshatrapa king found at Sonpur, about which there has been some misapprehension.

I. KĀRAÑJĀ COIN OF RUDRASENA II : ŚAKA YEAR 186

Weight : 33 grains. **(Pl. IV. 5)** Size : ·55″ in diameter.

Obverse : Bust of King to right with Saraf's marks. Traces of some letters on the head; behind the ear, the date 186 in numerical symbols.

Reverse : Hill or Chaitya of three arches, with the crescent on the top and a star to right; below a wavy line; round the edge inside a border of beads the legend beginning at 1—*Rājñaḥ Kshatrapasa Vīrdāmaputrasa Rājñaḥ [Mahākshatrapa] Rudrasenasa.*

The symbol for 6 is rather doubtful. The upper part of it which is partly visible is broad, not like a fork. It seems therefore to denote 6, not 4. I therefore take the date to be 186, not 184. The letters *Mahākshatrapa* are partially cut

1. See "Coins and Seals from Madhya Pradesh" *Numismatic Notes and Monographs* No. 5 by B. C. Jain, pp. 10ff.

at the edge of the coin, their lower portions only being visible. There is not, however, much uncertainty in the reading of the legend, which means that 'this coin is of the *Rājan* and *Mahākshatrapa* Rudrasena, the son of the *Rājan* and *Kshatrapa* Vīrdāman'.

II. SONPUR COIN OF RUDRASENA II : ŚAKA YEAR 189

Weight : 34 grains. **(Pl. IV. 6)** Size : ·55″ in diameter.

Obverse : Bust of King as above, with several punch-marks ; the date behind the year 189 in numerical symbols.

Reverse : Hill etc. as in the case of Coin I; legend commencing at 1—*Rājñaḥ Kshatrapasa Vīra-*[*dāma-putrasa Rājñaḥ Mahā*]*kshatrapasa Rudrasenasa.* The letters *dāmaputrasa Rājñaḥ Maha* are partially cut at the edge.

It will be noticed that though Rudrasena II calls himself *Mahākshatrapa*, his father Vīradāman bears the lower title *Kshatrapa.* As Rapson has shown, the latter's coins, issued when he was ruling as *Kshatrapa*, bear dates ranging from 156 to 160. He seems to have died in Ś. 160; for the coins of his successors Yaśodāman I and Vijayasena, issued when they were Kshatrapas, bear the same date Ś. 160. Rudrasena II came to the throne in *circa* 177[1] and continued to rule at least till Ś. 196.

In the Sonpur hoard Shri Acharya found a coin bearing the date 199. I searched for it in the cabinet of the Nagpur Museum, but did not find any coin of that date. It is not known if that coin was among those distributed to other Museums at the time. I inquired of the Curator of the Indian Museum whether any such coin had been received there from the Nagpur Museum, but received no reply. In the Sarvania hoard Dr. D. R. Bhandarkar noticed a coin of this Kshatrapa, the date on which, though not quite certain, appeared to be either 198 or 199[2] The evidence of the aforementioned Sonpur coin would therefore have been invaluable on this point. I think, however, that Shri Acharya probably committed a mistake in reading the date in this case as he did in some other cases.[3] Coin No. II described above was probably the coin on which he read the date 199. The

1. See the coin bearing the date 177 in the Sarvania hoard, *ASI, AR*, 1913-14, p. 213.
2. Ibid., p. 236.
3. See Dr. Altekar's criticism in *JNSI*, Vol. VI, pp. 22 ff

second symbol, however, stands for 80, not for 90. The exact year in which Rudra closed his reign is uncertain. The coins of his son and successor Viśvasiṁha do not contain any definite date.[1] Another son Bhartridāman, who succeeded the latter has left coins bearing the date Ś. 200.[2] Recently I have received his coin of this date found at Basim.

The finds of several hoards and stray coins of the Western Kshatrapas in different parts of Vidarbha raises the question whether that country was included in their dominion. While describing the coins found at Sonpur (Chhindwara District of M. P.), Shri Acharya observed as follows:[3] "Since the Western Kshatrapas are not known to have had any control over the Central Provinces (now M. P. and Vidarbha), these coins could not ordinarily have been current in the district and the natural inference would be that some one must have acquired them from the Kshatrapa dominions and buried the treasure with the idea of removing it at a future date." But the coins have been found in several places not only in hoards but in single pieces. Besides, they belong to all kings from Rudrasena I (Ś. 121) to Svāmī Rudrasena III (Ś. 300).[4] They were not, therefore, casual deposits, but seem to have been in circulation for a long time in Vidarbha. Some of these kings were contemporaries of the Vākāṭakas. For instance, Rudrasena II, whose coins have been described here, was a contemporary of the powerful Vākāṭaka kings Vindhyaśakti I and Pravarasena I. As the Vākāṭakas did not strike any coins of their own, they were not loath to use the silver coins of the Kshatrapas just as they used the gold coins of the Guptas.[5] These finds of Kshatrapa coins do not, therefore, indicate that the country of Vidarbha was ever under the occupation of the Kshatrapa rulers.[6]

Sātavāhana Coins

In this Journal several coins have recently been published, the readings of the legends on which do not appear to be free from doubt. I propose to take some of them here and offer some suggestions for the consideration of

1. His coins, issued when he was *Kshatrapa*, bear, however, the dates 197 to 199 The coin issued by him when he was *Mahākshatrapa* bears the date 20 [x].
2. *ASI. AR*, for 1913-14, p. 238.
3. *Numismatic Supplement* No. XLVII, p. 95.
4. Ibid., p. 95.
5. See B. C. Jain, *Coins and Seals from Madhya Pradesh*, (NNM, No. 5), p. 11. Gupta coins have been found at Seoni, Pattan and Ellichpur in Vidarbha.
6. For the photographs of the coins reproduced here, I am indebted to Shri V. P. Rode, Assistant Curator of the Museum.

scholars. I had brought some of these to the notice of my friend Dr. A. S. Altekar, when we met last at Bhuvaneshwar. He asked me to write about them in this journal. It is very unfortunate that he is no longer with us to give his opinion about them.

I. A COIN OF CHAKORA SĀTAKARṆI

(Pl. IV. 7)

This coin has been published by Shri Dinkar Rao in this Journal, Vol. XXI, Part I, pp. 18 ff., Pl. 1 (3). This coin was picked up in Hyderabad (Deccan). It is of the same type as those found at Tarhala, which I have published in this Journal, Vol. II, pp. 83 ff. The coin is of potin and shows an elephant with uplifted trunk on the obverse and the Ujjain symbol on the reverse. Rao has read the legend as *Rajño Chakora Sātakarṇi(sa)*. He says that the legend begins at VIII. He attributes the coin to Chakora Sātkarṇi and since no coin of this king had been discovered, he calls it unique. If this coin could be attributed to Chakora Sātakarni, it would be very good indeed ; for it would disprove the theory that Chakora did not belong to the Imperial Sātavāhana family. But unfortunately Rao's reading is far from certain. What he takes to be the letters *rajño* appears to be the tail of the elephant. The first clear letter is *ña* at X. It is clearly the second letter of the word *raño* meaning *rajñaḥ*). The following letters are clearly *Sataka-*. Evidently the legend was *Raño Sātakaṇisa*. If the royal name Chakora had occurred on this coin, it would have followed *ña* (i. e. *ño*). But there is no trace of it there. Much as we would like to have a coin of Chakora Sātakarṇi, we must say that this coin does not belong to him. It was issued by one of the several Sātakarṇis who belonged to the Sātavāhana family.

II. A COIN OF VIJAYA SĀTAKARṆI

(Pl. IV. 8)

This coin also has been published by Shri Dinkar Rao in this Journal, Vol. XXI, Part I, pp. 68-69, Pl. I (5). He says that the coin has a legend in Brāhmī, beginning from over the top arch of the Chaitya partly clockwise and partly anticlockwise. From XII to III we have to read *Vijaya* and from XI to V *Sātakaṇisa*.

No coin containing the complete name of Vijaya Sātakarṇi has yet been found. I noticed some coins with the legend *yā-Sātakaṇisa* in the Tarhala hoard. Hoernle had previously read *Rājño Va* on some coins of the same type

found at Chanda. So putting these two fragments together, I attributed these coins to Vijaya Sātakarṇi, mentioned in the Purāṇas as a king of the Andhra (i. e. Sātavāhana) dynasty. We shall be very glad if Rao's coin turns to be one of Vijaya Sātakarṇi, giving the royal name completely. But unfortunately the reading is uncertain in this case also.

The impression of this coin is very indistinct and so its reading cannot be free from doubt. It would be very queer indeed if part of the legend is to be read clockwise and another part in the opposite direction I do not remember to have seen such a Satavāhana coin. Even in this unsatisfactory impression some letters appear fairly clear. See e. g. *ma* at X, *ra* and *sa* at I and II, *ka* at V and *ṇa* (lower part) at VI. I would therefore suggest the reading *Samasa sara Satakaṇasa* (meaning Sāmisa Siri-Sātakaṇisa) beginning at IX and going round the edge inside the border. If this is correct, the coin would belong to Śrī Sātakarṇi. For the epithets *sāmisa* and *siri* coming together, see the legend *Raṇa sāmisa siri Yaña Sātakaṇisa* on the ship-type coin of Yajña Sātakarṇi, published by me in this Journal, Vol. III, pp. 43 ff. There is no trace of any *aksharas* of *Vijaya* anywhere.

III. A COIN OF SOME SĀTAVĀHANA FEUDATORY (?)

(Pl. IV. 9)

This coin also was picked up at Hyderabad (Deccan) and has been published by Shri Dinkar Rao in this Journal, Vol. XXI, Part II, pp. 112-13, Pl. VI (3). Rao has read the legend on the obverse as *Asavarikaḍa Yashabhaṭasa.* He takes this to be a coin issued by a feudatory of the Sātavāhanas named Yaśobhaṭa or Yaśobhuti, who was ruling over Asavarikaḍa, which was conquered by him. Alternatively he suggests that Yaśobhūti was an Ābhira king who conquered Asavarikaḍa and made it his headquarters.

This seems to be a case of a bad reading leading to worse interpretation ; for Rao's reading is far from certain. All the letters on the coin have not come out in full size on the obverse ; but some are fairly clear. Beginning at III, one can read *Sarā samasa* (meaning *Siri sāmisa*) almost without doubt. The following letter appears to be *sa*, only its lower portion being visible. The following letters are uncertain. So the name of the king cannot be read, but the general resemblance of the type with that of Sātakarṇi (No. III discussed above) leaves no doubt that it belongs to a Sātavāhana king. As the epithet *Sāmi* (Sanskrit, *Svāmī*) is found used with the name of Sātavāhana rulers, we cannot say that it could not have been issued by a Sātavāhana king.

SOME INTERESTING COIN-DATA FROM UPARKOT, JUNAGADH

K. V. SOUNDARA RAJAN

[Pl. IV]

The coinage of the Western Kshatrapas has received considerable attention but their history after Viśvasena,[1] son of Bhartṛidāman, is still obscure.

Recently, as a preliminary to the treatment of the roof of the rock-cut caves at Uparkot, Junagarh, 3′-4′ deposit of culture debris thereon had to be removed. During the course of the excavation, ten Kshatrapa coins together with other antiquities roughly corresponding to the Kshatrapa period were discovered. A brief description of the antiquities thus revealed has been published elsewhere.[2] In the present paper, however, a detailed study of these coins is attempted.

Out of the ten coins, nine were in lead and the remaining one in debased silver. Three of the lead coins are badly worn out which makes them of little use for study. Two of the six better preserved specimens belong, one each, to Yaśodāman II, son of Rudrasimha II and to Swāmī Rudrasena III, while the remaining four coins represent the last known king Swāmī Rudrasimha III. The coins are rectangular in shape and have Bull to right on the obverse and the Chaitya symbol with date (in regnal year) in the exergue on the reverse. The coin of Yaśodāman II is dated Śaka (2) 54 = (3) 32 A. D.; that of Swamī Rudrasena III, Śaka 28 (?) = 36 (?) A.D.; while those of Swāmī Rudrasimha III, Śaka 314 = 392 A. D. Thus they are datable from about 332 to 392 A. D. The solitary silver coin is an issue of Mahākshatrapa Bhartṛidāman (289-295 A. D.) whose coins are well known.

Description of Coins

I. COIN OF YAŚODĀMAN II, SON OF RUDRASIMHA II.

Lead : Square ; Size .5″ ; wt. 35 grs.

Obverse : Humped bull standing to r. ; square border of dots.

Reverse : Chaitya &c. ; beneath date ; square border of dots. Date : Śaka (2) 54 = 332 A. D.

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1. E. J. Rapson, *Catalogue of Indian Coins—Andhras, Western Kshatrapas etc.*, 1908.
2. *Indian Archaeology—A Review (1958-59).*

The coin appears to have been in heavy use as shown by the worn out and abraded nature of its stamped symbols. The stamp had been struck diagonally to the square surface both on the obverse and reverse. The numerals differ in size and two of them are quite minute.

II. Coin of Swāmi Rudrasena III, son of Swāmī Rudradāman II. (Pl. IV. 10)

Lead : Square ; Size ·5″ ; wt. 23 grs.

Obverse : Humped bull standing to r. ; square border of dots.

Reverse : Chaitya &c. obliquely stamped ; beneath date truncated ; square border of dots.
Date : (Śaka) 28(?) = 36(?) A. D.

This again is very much used but it must have been quite thin even at the time when it was struck, indicating, possibly, the troubled times. The designs are stamped diagonally, on the reverse, and horizontally on the obverse. The Chaitya symbol is angular and crude, pointing perhaps to a fall in the craft. The last digit is not at all seen and could be any thing from 1 to 9. Since the coins of Rudrasena III are known upto the Śaka 300 (378 A. D.), it is clearly an issue of this king. It is the thinnest and the lightest coin of the series under discussion.

III. Coin of Swāmī Rudrasimha III, son of Swāmī Satyasimha. (Pl. IV. 11)

1. Size ·55″ ; wt. 63 grs.

Obverse : Humped bull standing to r. ; square border of dots.

Reverse : Chaitya with moon and stars surmounting it ; square border of dots.
Date : (Śaka) 314 = 392 A. D.

The coin is the best preserved of the series with designs excellently etched in bold relief. The obverse shows the bull facing a symbol, probably a *Yūpa* or some altar. Just above the back of the bull is a trefoil symbol. The reverse does not call for any further remarks.

2. Size ·55″ ; 55 grs.

Obverse : Humped bull standing to r. ; facing a short pole of some sort with a symbol above its

back; less clear than in specimen No. 1; square border of dots.

Reverse : Chaitya with moon and stars, formed on proper left and the latter on proper right; below a wavy line with regnal year underneath, same as in the previous specimen. (314 Śaka).

This coin is less regularly trimmed along its edges but retains otherwise all the qualities of the previous specimen. It is much pitted at places.

3. Size ·5″; 50 grs.

Obverse : Largely corroded and pitted.

Reverse : Chaitya symbol with moon and stars on either side above, with many lines and date below. The stamp has shifted a little lower with the result that the border is well within the upper edge of the reverse and the date is only partially seen. The workmanship, the finished nature of the edges, indicate the continuity of the efficient coin moulding. The specimen, however, is less well preserved than the previous two.

4. Size ·6″; wt. 60 grs.

Obverse : Largely oxidised and pitted.

Reverse : As on No. 3 but of poorer metal alloy; surface of the coin cracked.

The importance of these coins lies in revealing a new fact that the lead coinage with Bull and Chaitya motifs was current even in the time of Yaśodāman II. The first digit on this alleged coin of Yaśodāman cannot be taken as 3 instead of 2 since the date in that case would correspond to 432 A. D and fall in the reign of Kumāragupta I which is prima facie untenable. Thus the numismatic evidence indicates that the Western Kshatrapa kings, at least from Yaśodāman's time onwards, adopted lead coinage as a subsidiary to the silver coinage probably due to economic reasons and that Rudrasimha reigned at least upto 392 A.D. as shown by the coin.

These coins are attributable to Yaśodāman and Rudrasimha III only on the ground that firstly they are similar in fabric to the lead issues of Rudrasena III and secondly, the dates on the coins, which are presumably in the Śaka era, fall in their periods. As no lead issue earlier or later than those of

Swāmī Rudrasena III was known till now, the discovery of these coins is very informative. They show that the lead coinage had already been started by Yaśodāman II and was continued by Rudrasimha III, son of Swāmī Satyasimha. It is interesting to note that the Rajkot museum hoard from Uparkot (about 1200 specimens) used by Rapson for the description of some of the coin fabrics of the Kshatrapas, was discovered in 1897 from the rock-cut safety pits from Uparkot. It ranged from Rudrasena I (C. 197 A.D.) to Swāmī Rudrasena III (341-378 A.D.) but did not contain lead coinage of any other king except Rudrasena III.

From the comprehensive occurrence of all the associated cultural vestiges and antiquities of the Western Kshatrapas from the Buddhist cave roof as aided by coin data, it may be indirectly taken that there was a continuance of the Kshatrapa hegemony at least in Saurashtra without any cultural intrusion from Bhratridāman to Rudrasena III since no other coin issue or cultural material is available from this excavated earth. This has to be considered in the light of the doubts caused by the Uparkot hoard in Rajkot Museum and the consequent prevalent view that Rudrasena III's disturbed reign and absence of coin issues for some years meant foreign intrusion and control over the area, which would have justified the burial of a hoard.[1] Indeed it has even been held by V. V. Mirashi[2] that the intruders should be forerunners to Valabhi kings, to whom the coin issue with Trident motif and legend "*Rājño Mahākshatrapa (pa ?) remaditya-bhakta-Mahāsāmanta Śrī Sarvva-Bhattārakas*," should be ascribed. We may note straight away that such a coin has not been available from our salvage excavations.[3]

1. Scott, *JBBRAS*, XX, p. 201.

2. "The Legend of the Valabhi Coins", *JNSI*, VI, pp. 14-18.

3. A few other interesting side issues which are drawn into the scope of the present study should be stated here. The fact of Rudrasena's father Rudradāman II not having had any known coin issue despite having deserved a mention in the former's coinage with "Mahākshatrapa" appellation had piqued scholars. It is of course quite likely that coins of his reign have not yet been discovered and could come out in future. It is also possible that the period represented some political disturbances and might have resulted in much of the coinage of his period having gone under the earth as hoards. Be this as it may, we do seem to have corroboration, from an entirely unexpected quarter, of Rudradāman II having retained his throne in tact in some form at Ujjain and having been concerned with some benevolent activities though outside his realm.

In the recently discovered Abhira Inscription from Nagarjunakonda, (*Indian Archaeology-A Review-1958-59*—p. 8 & pl. VA,) we have the mention of this king. The epigraph which is dated

simply in the 9th regnal year of Abhira king Vaśishthīputra Vasushena, purports to record the consecration of a wooden image of Ashtabhujaswami, and mentions the following persons, namely, Mahatalavara Mahagramika, Mahadandanayaka Śivashena of Kauśikagotra, the Yavana prince of Sanjayapuri. Śaka Rudradaman of Avanti, and Vishnurudra-śivalananda Sātakarni of Vanavasa, as having had some share in the benefactions made in the reign of this Abhira king.

Now the palæography of this inscription is like all later Ikshvaku inscriptions of the times of Rudrapurushadatta, with a few peculiarities common to Kshatrapa inscriptions also. It could be approximately dated to the early part of the 4th Cent. A. D. It is known that there had been, in the main, only four monarchs, Sri Chantamula, Sri Virapuradatta, Sri Ehavala Chantamula and Sri Rudra Purushadatta, in the Ikshvaku line of Nagarjunakonda. The consensus of archaeological and other evidences suggest the epoch of the Ikshvaku dynasty as approximately 210 A. D. Giving roughly 25 years for each reign on an average, which may rather be on the greater side, we arrive at the first quarter of the 4th Century A. D. The Abhira reign was thus essentially marking the end of the Ikshvaku rule and denoted an era of empire break-up, resulting in northern dynasties like the Abhiras taking temporary possession which was subsequently to be changed, by the Pallavas and Chalukyas variously, half a century later. Thus from the peculiar cultural and chronological implications of the inscription, the name of Śaka Rudradaman of Avanti mentioned in the inscription can only mean Rudradaman II, father of Rudrasena III. That he could find time to indulge in the benevolent activities at such a distant ambit would seek to show one of the two things: (a) that he had a comparatively peaceful reign and was ruling from Avanti and was in very congenial terms with the temporary lord of Nagarjunakonda at that time, namely Abhira Vasushena, (b) that he had only retained normal title and hold over the Avanti throne and much of his kingdom had temporarily been run over or aggrandised by other powers and he was living virtually in subjection and joining hands with Abhira king (who was probably his overlord then), in non-political activities. The fact that he had simply been mentioned as Śaka Rudradaman without any other titles would seem to favour the conclusion that his status had been lowered. On the other hand, the rather deliberate boosting of Mahatalavara Mahagramika, Mahādandanayaka Śivashena of Kausikagotra, who was probably the kinsman of Abhira Vasushena and his commander, might suggest the military "*coup-de-etat*" that was achieved by the Abhiras over Ikshvaku Kingdom. That it might have been the Abhiras who were mainly responsible for the aggrandising over of much of the Western Kshatrapa dominions in Western India and Saurashtra now and then in the 4th Century A.D. would also tend to fall into its proper place. In the sequel, we seem to have in Śaka Rudradaman of this inscription, most probably Rudradaman II, father of Rudrasena III who could no doubt have been Mahākshatrapa at the inception of his reign, but would have subsequently been cut to size by the Abhira group and we thus do not hear of any political achievement associated with him. However, his having been "Mahakshatrapa" once might have been filially recalled in the coins of Rudrasena III.

CUNNINGHAM COLLECTION OF SEALS IN THE BRITISH MUSEUM

M. G. DIKSHIT

[Pl. V & VI]

In a recent visit to U. K. as the guest-visitor of the British Council, I was able to study in the British Museum a large collection of seals and sealings belonging to the late Sir Alexander Cunningham and in the Altekar Memorial Number of the *JNSI*, I give a short account of this collection as a tribute to the memory of the two scholars who have done so much to the cause of Indian Numismatics.

The Cunningham collection comprises over 121 seals and sealings of semi-precious stones and copper. There is no definite information regarding the find-spot of the individual specimens but it may be presumed from other similar material published by him that these were acquired by the owner from different parts of India, notably from the Punjab and the then North West Frontier Province (now in Pakistan). From the numbers borne by some seals in the handwriting of the General it is likely that short descriptive catalogue of this collection was intended. I was not able to trace any of the seals included in the present collection in the Cunningham's papers in *Numismatic Chronicle*, 1895 or in *JASB*, Vol. X (1841). Grateful acknowledgement is here made to the Trustees of the British Museum for kindly allowing me the access to this unpublished material.

With the exception of seals which are in copper, a large majority of the seals are carved on hard stones like agate, carnelian, sard, lapis lazuli, rock crystal, garnet and onyx. The stones are very carefully selected but the banded structure or the mottled appearance of certain specimens render it very difficult to take good photographs from the originals. It was advisable therefore to take Plaster of Paris impressions from these which are used for the illustrations.

The seals are of various sizes and shapes, oval and rectangular being the most favourite shapes. With the exception of a few button seals and bezels, nearly all the specimens are perforated along the horizontal axis. The inscribed surfaces are generally flat but among the specimens of the Śaka and Gupta periods there is a marked tendency

for convex surfaces with scaraboid appearance. The copper seals are generally attached with soldered loop handles.

According to the glyptic qualities, considerations of style and the palaeography of the legends, these are classified into following six classes :

(1) Indo-Parthian or Śaka
(2) Kushāṇa
(3) Sassanian
(4) Hephthalite
(5) Gupta, and
(6) Un-inscribed.

Seals of Class 3 and 4 are excluded from the present catalogue. The following is the description of a few selected specimens.

Class 1—Śaka Seals

No. 1 Oval seal of Sard. L. 14 mm. X B. 11 mm.
Legend : *Ratnika*

(Pl. V. 1)

No. 2 Oval seal of Garnet.
L. 18 mm. X B. 13 mm.
Showing a crude bust of youth facing rt..
Legend along the left margin reading : *Dharmadatta*
(Pl. V. 2)

No. 3 Tiny circular seal of Garnet.
L. 12 mm. X B. 11 mm.
Showing a robust youth facing right.
Legend along the left margin reading : *Nānadeva.*
(Pl. V. 3)

No. 4 Fine oval seal of Sard (white on red).
L. 16 mm. X B. 11 mm.
Legend reading horizontally : *Misandyura.*
(Pl. V. 4)

No. 5 Large circular seal of Lapis Lazuli. Dia : 2 cms.
Showing a fine bust of a warrior facing rt.
Legend on the right margin reading : *Vatsa Śaka*
(Pl. V. 5)

No. 6 Small rectangular seal of Carnelian.
L. 15 mm. X 12 mm.
Shows a chronogram.

(Pl. V. 6)

Class 2—Kushāṇa Seals

No. 7 Small oval seal of scaraboid shape. Lapis Lazuli.
L. 18 mm. X B. 13 mm.

Legend reading horizontally: *Kauvadāra*, with a pentagonal star at top.

(Pl. V. 7)

No. 8 Small circular seal of Lapis Lazuli. Dia: 7 mm. Legend: *Bha-a-ta* (Skt. *Bhadaṃta*).

(Pl. V. 8)

No. 9 Large oval seal of Lapis Lazuli, scaraboid. L. 24 mm. X B. 15 mm. Showing an altar in the centre with legend on either side reading: *Yaduvala* (Skt. *Yadubala*)

(Pl. V. 9)

No. 10 Flat oval seal of Carnelian. L. 28 mm. X B. 10 mm. Legend: *Abhadra*, followed by a trident

(Pl. V. 10)

No. 11 Oval seal of Carnelian, scaraboid. L. 25 mm. X B. 20 mm. Chakra on top. Legend below, reading: *Rurubhāvaṇham*

(Pl. V. 11)

No. 12 Oval seal of Carnelian. L. 21 mm. X B. 12 mm. Figure of a fire-altar in the centre, followed by a symbol. Legend reading: *Rājaderi.*

No. 13 Oval seal of Garnet, scaraboid. L. 14 mm. X B. 9 mm.

(Pl. V. 12)

Legend reading: *Bharadāma*

No. 14 Oval seal of Garnet, convex surface. L. 14 mm. X B. 6 mm. Branched tree above. Legend below, worn: *Tamobhuti*

(Pl. V. 13)

No. 15 Oval seal of Garnet, convex surface. L. 21 mm. X B. 17 mm. Bust of a young lady facing left. Inscription on the right reading: *Padasiri*

(Pl. V. 14)

No. 16 Oval seal of Sard, bevelled edges. L. 16 mm. X B. 14 mm. Mythical figure of a horse with claw feet. Inscription on top, reading: *Cha(m)dra*

(Pl. V. 15)

No. 17 Rectangular seal with bevelled edges, Black Agate: L. 16 mm. X B. 13 mm. Legend reading in a rectangular border, *Amātyasa* (?)

(Pl. V. 16)

No. 18 Oval seal of Sard or Banded Agate.
L. 18 mm. X B. 13 mm.
Figure of a horse.
Legend reading: *Śivabhadra*

(Pl. V. 17)

No. 19 Flat rectangular sealing of Copper, having a soldered ring at the back. L. 25 mm. X B. 16 mm.
Within a rectangular border, legend reading:
Śri Maheshwara

(Pl. V. 18)

No. 20 Square seal of copper with a looped handle
L. 18 mm. X B. 18 mm.
Symbols and unconnected letters in two lines.

(Pl. V. 19)

Class 5—Gupta Seals

No. 21 Flat oval seal of Carnelian. L. 11 mm. X B. 9 mm.
Horizontal inscription in box-headed Central Indian characters of about 5th century A.D., reading:
Apramāda

(Pl. V. 20)

No. 22 Oval seal of Carnelian, scaraboid in shape.
Similar to above.

(Pl. V. 21)

No. 23 Flat rectangular seal of Banded Agate
L. 10 mm. X B. 8 mm.
Inscription reading *Prabhu-nandi* in characters of 6th-7th century A.D. Late Gupta.

(Pl. V. 22)

No. 24 Flat oval seal of Banded Agate.
L. 14 mm. X B. 10 mm.
Horizontal inscription reading *Nandi-bhā(r)yyam* in Gupta characters of about 5th-6th century A. D.

(Pl. V. 23)

No. 25 Flat oval seal with bevelled edges, Carnelian.
L. 12 mm. X B. 9 mm.
Inscription in Central Indian Gupta characters reading *Narmmayuva*, 6th century A.D.

(Pl. V. 24)

No. 26 Flat oval seal with bevelled edges, Garnet.
L. 10 mm. X B. 8 mm.

Inscription reading *Śri Gudeśa* in characters of about 6th century A.D.

(Pl. V. 25)

No. 27 Oval seal of Garnet with a convex surface.

L. 8 mm. X B. 6 mm.

Broken seal with a partially preserved legend, reading *Vishṇuka*

cf. No. 30 below.

(Pl. V. 26)

No. 28 Long oval seal of Garnet, scaraboid.

L. 15 mm. X B. 8 mm.

Inscribed in Central Indian Gupta characters of 6th cent. A. D.

Legend : *Bhavamardya*

(Pl. V. 27)

No. 29 Long oval seal of Garnet, scaraboid.

L. 20 mm. X B. 12 mm.

Un-inscribed Gupta seal, very well executed and shows the figures of a Triśula (trident) in the centre, Chakra to left and Śaṃkha to right.

(Pl. V. 28)

No. 30 Long oval seal with a convex surface, Garnet. Scalloped back and pierced at side.

L. 14 mm. X B. 10 mm.

Inscription laid horizontally reading *Vishṇuka*, followed by a Nandipada. The perforation forms the base of the Nandipada. Gupta period.

(Pl. V. 29)

For a seal with similar legend, see No. 27 above.

No. 31 Large oval seal of Crystal with a convex surface.

L. 20 mm. X B. 18 mm.

Inscription reading *Alha*, followed by *Jā* or a symbol in characters of about 4th century A. D.

(Pl. VI. 1)

Cf. *ASI,AR*, 1928-29, Plate LVI, 62 for a similar seal. The reading *Sala* in the text is wrong.

No. 32 Oval seal of Crystal. Convex inscribed surface.

L. 19 mm. X B. 7 mm.

(Pl. VI. 2)

Inscription reading : *Guṇashapa*

No. 33 Large oval seal of copper having a looped boss at the back. L. 4 cms. X B. 3½ cms.

In the field, couchant lion to right.

Nandipada in front.

Legend below, reading : *Śri Bhadrasya*

(Pl. VI. 3)

No. 34 Small oval seal of Carnelian, convex inscribed surface. L. 18 mm. X B. 6 mm.
Legend reading : *Śri Kusaukkasya*

(Pl. VI. 4)

No. 35 Large oval seal of Copper. Ht. 3½ cms. X 2·7 cms. In the field, couchant lion facing rt. with a symbol in front.
Legend below reading : *Śri Śaracha (m) (dra) sya*

Class 6—Un-inscribed Seals

No. 36 Carnelian oval flat seal L. 12 mm. X B. 8 mm.
Centaur in crude outline.

2nd cent. A. D.
(Pl. VI. 5)

No. 37 Carnelian scaraboid shape. L. 15 mm. X B. 13 mm.
Crude figure of a lion, facing left. Taurine on top. 2nd cent. A. D.
(Pl. VI. 6)

No. 38 Garnet, oval seal, L. 12 mm. X B. 11 mm.
Two human figures in crude outline, one playing on the vīṇa and the other having a long pigtail (veṇī). cf. No. 37 below. 1st-2nd cent. A. D.
(Pl. VI. 7)

No. 39 Banded Agate, oval seal. L. 14 mm. X B. 11 mm.
Two crude figures, one playing on the vīṇā and the other having a pig-tail (veṇī), similar to No. 38 above. 1st-2nd cent. A. D.
(Pl. VI. 8)

No. 40 Carnelian, oval seal. L. 14 mm. X B. 12 mm.
Flying figure of a Kinnara ending in a foliage-
Indo-Parthian.
(Pl. VI. 9)

No. 41 Carnelian, button seal. L. 10 mm. X B. 9 mm.
Ht. 12 mm.
Crude figure of a winged horse. 2nd cent. A D.
(Pl. VI. 10)

No. 42 Opalescent Quartz, oval seal with a convex top and a flat base, perforated along horizontal axis. L. 16 mm. X B. 11. Lion facing left, Swastika on top and Taurine in front.

1st-2nd cent. A. D.
(Pl. VI. 11)

No. 43 Quartz, bead-seal with oval base. L. 18 mm. X B. 8 mm ; Ht. 10 mm.
Pair of Haṁsas facing each other :
One bearing a symbol and other with a branched tree, inscribed on convex surface. 2nd-3rd cent. A.D.
(Pl. VI. 12)

No. 44 Carnelian button seal, perforated along short axis. L. 15 mm. X B. 10 mm. ; Ht. 15 mm.
Crude figure of a pig with a bird on the back.
2nd cent. A. D.
(Pl. VI. 13)

No. 45 Green Jasper, bead seal. L. 12 mm. X B. 10 mm. ; Ht. 13 mm.
Figure of a ram to right. 2nd cent. A. D.
(Pl. VI. 14)

No. 46 Carnelian, bead seal probably rolled on a swivel. Dia. 20 mm. Ht. 15 mm.
Crude figure of an animal much worn by use. Broken.
Period uncertain
(Pl. VI. 15)

No. 47 Chalcedony, bead seal, circular. Dia 12 mm. Showing a centaur, with peacock's body, ram's head, holding a cross in one hand and a jug in another.
Parthian
(Pl. VI. 16)

No. 48 Carnelian, oval seal with tapering sides. L. 14 mm. X B. 8 mm. Seated deer to right.
Probably 2nd cent. A.D.
(Pl. VI. 17)

Though the collection is comparatively small and described only partially, it is important in more than one ways. Most of the seals belong to a period when the North west region of India was greatly under the influence of the foreign invaders. Many of the seals belong to private individuals and it is interesting to see that there are a few duplicates among them. Their intended use for marking some personal possessions is obvious. Nearly all the specimens are perforated showing that they were once threaded on strings, making them convenient to carry and giving them the necessary backward pull while taking off from the impressions. Except in a few cases their execution is remarkably neat and precise and is particularly to be marked amongst the seals bearing portraits. The artistic qualities must be admired as the space on each seal is very limited and the letters have to be necessarily carved in reverso. The shapes

of the button and other seals show a wide range of forms and if a careful study of these is made it may perhaps be possible to arrive at certain tentative conclusions if certain types were characteristic of a certain period.

The range of designs in the "Un-inscribed" varieties is almost unlimited and one has still to explain why a large majority of them are taken from the animal world. The general decline in the use of seals of semi-precious stones in the period succeeding the Gupta age and the preponderance in the use of terracotta sealings in the successive ages in India are still some of the problems which await the consideration of the student of Indian numismatics and the glyptic art. These and allied problems could only be solved as and when more and more of such material from private collections such as this and those obtained through stratified excavations would be published.

NEW COPPER COINS FROM KAUŚĀMBĪ AND VIDIŚĀ

K. D. BAJPAI

[Pl. VI]

Four new interesting copper coins have recently been obtained by me from Kauśāmbī and two from Vidiśā. They are described here.

No. 1—COIN OF RĀMAMITRA.

Æ ; rectangular, ·35″ × ·3″, irregular at one end ; wt. 17·00 grains.

(Pl. VI. 18)

Obverse: Tree within railing with prominent leaves; Nandipada symbol at the left top. Brāhmī legend at the left edge below Nandipada *Rāmami*[*tasa*].

Reverse: Blank.

The palaeography of the legend would assign the coin to a period between 1st century B. C. and 1st century A. D.

No. 2—COIN OF PRIYAMITRA.

Æ ; rectangular, slightly cut at right bottom, wt. 14·72 grains.

Obverse: Brāhmī legend (of about 100 B.C.) *Prayamitasa.*

Reverse: To right tree in railing.

(Pl. VI. 19)

No. 3—COIN OF JYESHṬHAGUPTA.

Æ ; round, ·65″ ; wt. 91·5 grains.

Obverse: Standing male figure to front; right hand raised up, left placed on the hip. Brāhmī legend on the right border *Jeṭhayatasa* (Script 2nd or 1st century B. C.)

(Pl. VI. 20)

Reverse: Tree within railing ; other symbols blurred.

No. 4—COIN OF AṄGARĀJA OR AGRARĀJA.

Æ ; round, ·6″ ; wt. 73 grains.

Obverse: Tree within railing, Ujjain and taurine symbols. Above in rectangular incuse Brāhmī legend (in the script of 2nd cent. B. C.) *Agarajasa.*

Reverse: Bull walking to left in front of a *dhvajastambha.*

(Pl. VI. 21)

The first three coins have brought to light the names of three new kings of Kauśāmbī, not known so far. In so far as coin no. 4 is concerned, on the basis of a similar copper coin in the Patna Museum, published in the *JBORS*,[1] K. P. Jayaswal suggested that the coin was issued by Pushyamitra Śuṅga, the first ruler of the Śuṅga dynasty. He read the legend as *Sugarajasa.* A similar coin was published by A. S. Altekar, who first read the legend as *Śu[ṅ]garājasa.*[2] But later on, while publishing two more coins from the collection of B. M. Vyas of Allahabad, Altekar revised his earlier opinion and correctly read the legend as *Agarajasa.*[3] Altekar, refuting the theory of Jayaswal, showed that the coin was issued by a king of Kauśambī, called Aṅgarāja. There is so far no numismatic evidence to prove that the originator of the Śuṅga dynasty of Magadha ever issued any coins.

The new coin is in a perfect state of preservation. On the Patna Museum coin as well as the coin published by Altekar, symbols below the legend *Agarajasa* are not clear. But on his two other coins and also on the present coin the symbols are prefectly clear. One of Altekar (pl. XII, no. 10) is almost of the same weight (72. 2 grains) as the new one. The legend and the symbols on the obverse and the figure of the bull on the reverse of the new coin are very clearly indicated.

The two copper coins described below (as nos. 5 & 6) were acquired from a coin-collector of Mathura, who obtained them from Vidiśā. The first of these bears the name of Śivagupta, a new king. The second coin is that of Sakhadeva (or Sukhadeva). The description is as follows :

No. 5—COIN OF ŚIVAGUPTA. **(Pl. VI. 22)**

Æ; r., ·4″; wt. 8.72 grains.

Obverse : legend *Sivagata* in rectangular incuse.

Reverse : Indistinct symbols.

The name of a king called Sivagata (or Śivagupta) is not known from numismatic sources. On the palaeographic ground the coin can be placed in the 2nd century B. C. The issuer of the coin appears to be a local ruler of Vidiśā.

1. Vol. XX, pp. 294-5, pl. II, no. 2.
2. *JNSI*, IV, Pt. I, pp. 14-15, pl. I, 17.
3. *JNSI*, IV, Pt. 2, pp. 137-8. pl. XII no 10-11. ; pl. I no. 17.

No. 6—COIN OF SAKHADEVA. **(Pl. VI. 23)**

Æ; r., ·55″; wt. 37·43 grains.

Obverse: A goad or staff with flag, below which is a spear. Brāhmī legend on the edge *Sakhadeva.*

Reverse: Blurred; faint traces of tree within railing.

H. V. Trivedi has published a similar coin in *JNSI.*[1] He read the legend as *makhaduta.* But on a close examination the legend would appear to be *Sakhadeva.* The coin should be assigned to the late 2nd or early 3rd century A. D., and not to the Śuṅga period as Trivedi thinks.

The name of king Sakhadeva or Sukhadeva is not so far known. Trivedi found the coin, published by him, in the coin cabinet of the Archæological Museum, Gwalior. The coin along with several others was, according to him, found at Pawāyā (ancient Padmāvatī), whereas the present coin comes from Vidiśā.

1. Vol. XVII, Pt. I, p. 53, pl. XV, I.

INTERESTING CAST COINS FROM KAUŚĀMBĪ

S. C. KALA

[Pl. VII]

The coinage of Kauśāmbī is varied and interesting. The known coins can be classified under two broad divisions: (a) coins issued by local rulers and imported from outside and (b) round and square cast coins having interesting motifs pictured upon them. Kauśāmbī coins have been published by a number of scholars in the past.[1] The Lanky bull coin is undoubtedly one of the most typical specimens from this place. This type offers several new varieties most of which have not been noticed by early numismatists. I describe below a few coins from the coin cabinet of the Allahabad Museum.

1. Cast copper, round, 3.2394 grammes. **(Pl. VII. 1)**

Obverse : Lanky bull standing to left; in its front there is a V topped banner. Above it a Nandipada, a cross within a circle and Ujjain symbol. Folded mane at the neck shown prominently.

Reverse : Running bull facing tree in railing to the right. One hind and one foreleg rest on a mountain. At the top of the tree and above haunch a Ujjain symbol. Three folds of mane shown prominently.

2. Cast—mixed copper-bronze, round 4.470 grammes. **(Pl. VII. 2)**

Obverse : Lanky bull standing to left; in its front there is a V topped banner. Above haunch indistinct symbols.

Reverse : Lanky bull standing on a mountain and facing tree in railing. Mane indicated by folds. Above haunch indistinct symbols.

Both these coins being new type are important. The late A. S. Altekar, published a similar coin[2] but it is not known how he identified the animal on the reverse of the coin as a horse. The two coins described above clearly

1. Smith, *Catalogue of Coins in the Indian Museum*, Pl. XX, Fig. 5; Cunningham, *Coins of Ancient India*, pp. 73; Allan, *Coins of Ancient India*, pl. XX-no. 3, 14 and pl XXI-1, 2; *JNSI*, Vol. IV, Pt. I, pp. 3-33, and *JNSI*, Vol. VIII, Pt, I, pp. 8-17.
2. *JNSI*, Vol. XX, Pt. II, pp. 45-46.

show horns and hump on the head and body of the animal respectively. The mane on the neck of the animal is however worth observation.

3. Cast—bronze, round, 1.8508 grammes. **(Pl. VII. 3)**

***Obverse*:** Lanky bull with raised neck facing tree in railing to the left. Above haunch Svastika.

***Reverse*:** Lanky bull facing V topped banner to the right. Above back Nandipada and Ujjain symbol. Wavy line emerging from the head and running upwards after passing through the horns.

4. Cast—bronze, round, 8.801 grammes. **(Pl. VII. 4)**

***Obverse*:** Lanky bull facing left. Nandipada symbol above. Traces of V shapped top of the banner seen.

***Reverse*:** Tree in railing in the centre. Below mountain on the left wheel and Nandipada and on the right Svastika and Ujjain symbol.

The lankey bull type coins are generally very thin but the present specimen is unusually heavy.

5. Cast—copper, round, 2.239 grammes. Medium variety cut at the top. **(Pl. VII. 5)**

***Obverse*:** Lanky bull standing and facing a V shaped banner to the left. Indistinct symbols above.

***Reverse*:** Lanky bull facing tree in railing to the right. Three of his legs rest on a mountain. Ujjain symbol near the head of the animal on the right.

6. Cast—copper, round, 4.201 grammes. **(Pl. VII. 6)**

***Obverse*:** Lanky bull facing V shaped banner to the left. Tail unusually raised and then lowered. Dot in between the horns. Indistinct symbols or legend above haunch.

***Reverse*:** Tree in railing. Below mountain. Wheel and Nandipada symbol on the left, Ujjain and Svastika symbol on the right.

7. Cast—mixed copper-bronze, round, 3.0 grammes. **(Pl. VII. 7)**

***Obverse*:** Lanky bull facing tree in railing to the right. One hind and one foreleg set on a mountian.

***Reverse*:** Lanky bull facing V topped banner

to the right. Indistinct symbols above haunch. Hind part resembles that of a horse but horns of the animal are clear.

8. Cast-bronze round, 5.1 grammes—Heavy type. **(Pl. VII, 8)**

Obverse : Lanky bull facing V topped banner to the left. Above haunch a symbol made of taurines.

Reverse : Mountain surmounting tree in railing in the centre. Ujjain symbol and Svastika on the right; wheel and Nandipada on the left.

9. Cast-copper-bronze mixed, round, 3.2226 grams. Very thin type. **(Pl. VII, 9)**

Obverse : Lanky bull facing V topped banner to the left. Mouth of the bull raised. Nandipada symbols above haunch. Hole below.

Usually the Lanky bull is found covering the entire obverse face of the coin but in this specimen half of the space has been taken by V topped banner alone.

10. Cast-bronze, round, 3.24 grammes. **(Pl. VII. 10)**

Obverse : Lanky bull facing Ujjain symbol to the left. Nandipada symbol near the bent foreleg. Svastika above the haunch. Dots seen around the rim.

Reverse : Tree in railing in the centre. Two sides of the railing are seen. The branches bifurcate on the sides. On the right side is seen a V topped banner.

11. Cast-copper, round, 5.2 grammes. **(Pl. VII. 11)**

Obverse : Lakshmi standing on a lotus flower in the centre and bathed by one elephant standing on a railing from either side. Her right hand is bent towards the shoulder, the left resting on the waist. Top and bottom part broken.

Reverse : Tree in railing in the centre. V topped banner and Nandipada symbol on the left, Ujjain and hollow cross on the right.

Allan has published a coin of this type[1] but the present one is a much better preserved specimen. There is also some difference in the posture of the Goddess. In the Allahabad Museum specimen, the Goddess bends her right

1. Allan—*Coins of Ancient India*.

hand towards the shoulder in place of the left hand as seen in the British Museum specimen.

12. Cast-bronze, round, 1.330 grammes. **(Pl. VII. 12)**

Obverse : Goddess Lakshmi standing in the centre and being bathed by one elephant from either side.

Reverse : Tree in railing in the centre. V topped banner to the left and hollow cross on the right.

No coin of this size has so far come to light at Kauśāmbī.

NEW COINS OF KING 'SĀTAVĀHANA'

S. B. DEO

[Pl. VIII]

The five coins under study were found in various layers in different trenches excavated at Nevasa, District Ahmadnagar, Maharashtra State. These excavations were carried out during 1954-56 by the Deccan College Post-graduate and Research Institute, Poona, under the auspices of the University of Poona.

The excavations revealed four phases of occupation. The first could be assigned to the Chalcolithic period. After its collapse, the site seems to have been abandoned as evidenced by a weathered layer indicative of the existence of luxurious growth of vegetation. The next occupants belonged to the early historic period, used black-and-red pottery, iron tools and weapons, and built houses of bricks. During the third period – i.e. Indo-Roman – Nevasians seem to have come in cultural contacts with the regions of the Roman empire as evidenced by the find of the red-polished wares, bullie, amphoræ, a copper dish with a boss in the centre and votive tanks. The last period is characterised by finds of the Muslim period.

The layers of the second and the third periods yielded nearly two hundred coins mostly belonging to the early and late Sātavāhanas. These are incorporated in the Report of the Nevasa Excavations which will be out shortly. However, the most typical coins of king Sātavāhana are reproduced here for specialised study by the readers of *JNSI*.

The most interesting coins in the collection are those which bear the legend meaning that they are the issues of king Sātavāhana. So far only four coins with such a legend have been published – two by V. V. Mirashi and one by Joglekar and Dikshit jointly. As the Nevasa coins bring to light further varieties, they are published here.

The details of the Nevasa coins are as under :

(i) Register No. NVS. 1981, Tr. I, Layer 3.

(Pl. VIII. 1)

Material	:	Lead
Shape	:	Round, diameter 26 mm. Thickness 4 mm.
Weight	:	168 grains.

Obverse : Bull walking right, on its hump and back three-arched hill, arches unconnected, legend marginally :

ra ña sa ra sa ta va ha ṇa (sa)

Reverse : Five-branched tree in railing, to its right triangle-headed symbol, to its top left an empty circle ; below the tree probably fishes and wavy line indicating a river.

(ii) Register No. NVS. 2186, Tr. I, Layer 3. **(Pl. VIII. 2)**

Material : Copper
Shape : Rectangular (18 × 16 mm.)
Weight : 61 grains.

Obverse : On the square surface, the legend and the animal figure seem to have been stamped incused; blurred traces of possibly a bull facing right, legend overhead :

Sa ta va ha ṇa

Reverse : Completely effaced.

(iii) Register No. NVS. 1175, Tr. X, Layer 3. **(Pl. VIII. 3)**

Material : Lead
Shape : Round, diameter 24 mm. Thickness 3 mm.
Weight : 206 grains.

Obverse : Bull walking right, over its back three arched hill, legend marginally :

raṁ ña sa ra sa ta va ha ṇa sa

Reverse : Five-branched tree in railing, over it a Triratna, to left of the tree a Nāga or Nandi-pada symbol, below it three fishes in a river (cf. 1981 above).

(iv) Register No. NVS. 3640. Tr. X, Layer 3. **(Pl. VIII. 4)**

Material : Lead
Shape : Round. Diameter 22 mm. Thickness 3 mm.
Weight : 179 grains.

Obverse : Elephant with upraised trunk walking right, in its front the triangle-headed standard ; on its back a group of four empty circles, the extreme right circle capped by a crescent, legend marginally :

ña sa ra sa ta va ha ṇa sa

Reverse : Mostly effaced but traces of a tree in railing.

(v) Register No. NVS. 6490. Tr. E, Layer 8. **(Pl. VIII. 7)**

Material : Lead

Shape : Round. Diameter 24 mm.
Thickness 4 mm.

Weight : 182 grains.

Other known Coins

As stated above, three coins of king Sātavāhana have been published so far. The first published by Prof. Mirashi is as follows. (*JNSI*, Vol. VIII, pp. 1-4 ; pl. II, No. 1 = Our **Pl. VIII. 5**).

Ex. Kaus Collection, Hyderabad

Material : Copper

Shape : Square

Obverse : Elephant facing right with trunk upraised, a 'peculiar' symbol (two short horizontal lines cut by a vertical one) in its front, a triangle-headed standard with a cross bar on its back, legend somewhat diagonally :

raṁ ño siri sādavāha (*ṇa sa*)

Reverse : Ujjain symbol each orb of which contains a pellet within two circles; Svastika with ends turned unusually in the reverse direction, partially cut Nandipada.

Mirashi ascribes the coin to king Sātavāhana, founder of the dynasty, and places him in the 3rd century B. C. on the basis of the following palæographical characteristics.

(a) palæography is earlier to that of Nanaghat,
(b) cursive '*da*' with its curve open on the left,
(c) '*va*' with its lower limb not flattened,
(d) '*ha*' having a short vertical,
(e) The *anusvāra* of '*ra*' appears on the right below the top.

Besides these palæographical peculiarities, it is held by Mirashi that the 'elephant' type is probably earliest and generally confined to the home-lands of the Sātavāhanas, i. e. the Deccan. Moreover, he points out that the Prakrit form Sādavāhaṇa occurs in the Nasik record of the reign of Kṛishṇa while the Sanskrit form with '*ta*' occurs at Nanaghat and in Pulumāvi's record at Nasik. He also holds that on later coins the form becomes *raṇā* for *raṇṇo* or *raño* for *raññ̃o.* From all these considerations, he thinks that he is justified in assigning the coin to the last quarter of the 3rd century B.C.

The second coin published by the same author (*JNSI*, XI, Pt. II, pp. 5 ff; pl. II, No. 1 = our **Pl. VIII. 8**), is totally different from the one described above. It is leaf-shaped, made of lead and bears on its obverse an elephant facing right but with trunk hanging down. The legend commencing below the legs of the elephant reads: *Si ri sa da va ha.*

The reverse bears Ujjain symbol with a pellet between its orbs and a crescent at the top. Mirashi holds that the palæography of the coin compares favourably with that of the Nanaghat record and hence must be of the same age. He therefore ascribes the coin to the founder of the dynasty. Another observation made by him is that since the coin was found at Kondapur, the former State of Hyderabad must have formed part of the dominions of the founder of the dynasty.

The third coin was published by M. G. Dikshit and S. A. Joglekar (*BDCRI*, VI, pp. 141-42 = Our **Pl. VIII. 6**). It is a rectangular piece of cast copper with the obverse depicting an elephant with upraised trunk walking right, legend in the field on top and symbol laid across horizontally below the legend. The legend runs (*Raño*) *S* (*i*) *ri Sādavāha* (*no*). The reverse has the Ujjain symbol consisting of cross and balls surrounded by the Nandipada or shield.

The authors hold that palæographically the coin is akin to the Nanaghat record and can be assigned to the first half of the 2nd century B. C. The Sātavāhana of the coin might be the personal name of the ancestor of Simuka.

Comparison with Nevasa Coins

Having described the three coins of king Sātavāhana published so far, we may note their characteristics and compare these with those belonging to the Nevasa coins.

These three coins can be grouped broadly into two groups, though all of them have the elephant motif on them. Pl. VIII. Nos. 5 and 6 are not far different from one another. Both are rectangular, bear the elephant with upraised trunk walking right, have the triangle-headed symbol laid across horizontally over the back of the elephant and are alike in palæography, to wit, short stumpy '*sa*', '*da*' open to right, and rounded '*va*'. The only difference seems to be there regarding the depiction of the elephant. It is depicted more neatly in coin No. Pl. VIII. 6. The obverse of both these coins is also akin save the Svastika and the Nandipada which are present on coin No. Pl. VIII. 5.

As compared to these two coins, coin No. Pl. VIII. 8 appears to be totally different. In shape it is oval, in material it is of lead, and the elephant on the obverse is shown with a drooping trunk. Unfortunately the original photograph is not clear for studying the palæography. But it may be noted that whereas in the case of coin Nos. 5 and 6 of Pl. VIII., the legend starts above the elephant in the field, the legend in the case of coin No. 8 of Pl. VIII. starts from below the leg of the elephant.

Regarding the reverse, the coin, though showing the Ujjain symbol with pellets, has the added peculiarity of a crescent and corner dots which are absent in coin Nos. 5 and 6 of Pl. VIII.

The Nevasa coins are totally different from the coins published by Dikshit, Joglekar and Mirashi. These can be grouped into three varieties as follows :

(a) Those with the bull motif and round outline,
(b) Those with the elephant motif and round outline,
and (c) That with some animal (possibly bull, part of horn is visible) motif but with rectangular outline and different palæography in an incused border.

We have thus five groups with details as follows :

Nos.*	Category	Shape	Material	Dimensions	Thickness	Obverse	Reverse
5,6	A	Rectangular or square	Copper	Square wt. 110 grains, 77 or 78 grains	—	Elephant, trunk aloft	Ujjain symbol
2	B	Rectangular	,,	18 x 16 mm. wt. 61 grains	1.5 mm.	Bull (?)	Effaced
8	C	Oval	Lead	wt. 98.9 grains	—	Elephant (rt.); trunk hanging	Ujjain symbol
1,3	D	Round	Lead	Diameters 26, 24mm. wt. 168 & 206 grains	4 & 3 mm.	Bull (rt.)	Tree-in-railing and other symbols

* The numbers refer to the coins in the Pl. VIII.

Nos.*	Category	Shape	Material	Dimensions	Thickness	Obverse	Reverse
4,7	E	Round	Lead	Diameters 22 & 24 mm. wt.179, 182 grains	4 & 3 mm.	Elephant (rt.); trunk aloft	Effaced (but possibly tree-in-railing

Palaeographical Peculiarities

We have already seen that Mirashi and Dikshit have assigned their coins to the founder of the dynasty on palaeographical grounds. They hold the view that the palaeography is akin to the Nanaghat record with some letters like '*va*' having close affinities to that of the Maurya '*va*'.

Palaeographically the Nevasa coins can be grouped into two categories :

(a) The square coin, Pl. VIII. 2

Here we have letters closely akin to the rounded forms of the Mauryan letters.

(b) The round coins, Pl. VIII. 1, 3, 4, 7.

The palaeographical peculiarities of these two groups may be summarised as follows :

Alphabet	Coin No. 2*	Coin Nos. 1, 3, 4 and 7*
sa	not visible clearly	short, loop going down, thick.
ra	effaced	short, stumpy, thick.
raṁ	,,	the *anusvāra* appears to the right hand bottom (No. 3)
ṅa	,,	thinner than other letters, not stumpy.
ta	thin, half-cut rounded base, thin long stem.	thick, angular base with biconical top and short stumpy stem.

* The numbers refer to the coins in the Pl. VIII.

Alphabet	Coin No. 2*	Coin Nos. 1, 3, 4 and 7*
va	thin stem, perfectly rounded bottom '*a*' *kāra* indicated by a short horizontal line below end of stem.	rounded base of a thick ring, stem stumpy.
ha	thin, long stem, rounded base.	short stem, thick.
ṇa	partly effaced	thick

On the basis of these characteristics we may put coin No. Pl. VIII. 2 to 2nd-3rd century B. C. while all the rest may be put a little later. Our coins (Pl. VIII. 1, 3, 4, 7) definitely show a degenerate form of letters indicated by stumpyness and thickness when compared with those published by Mirashi and Dikshit.

Another marked difference is that the Nevasa coins invariably give the legend as *Sātavāhaṇa*, whereas the coins Nos. Pl. VIII. 5, 6 and 8 published by Prof. Mirashi and others read as *Sādavāhaṇa*. However, it must be made clear here that as this name is of non-Aryan origin from the linguistic point of view, no useful purpose will be served in emphasising the precedence or otherwise of the form with either '*ta*' or '*da*'.

Even from the point of view of palaeography, we cannot rely much on fragmentary legends and incomplete stamping of some letters as is the case in all the coins mentioned in this article.

Thus, in summary, we may say that whereas Mirashi places his Sātavāhana in the 3rd-2nd century B. C. and Dikshit and Joglekar in the 2nd century B. C., the Nevasa coins show two distinct groups—not only palaeographically, but even by shape, material and fabric—in the Sātavāhana coins. If we assign coin No. Pl. VIII. 2, to 2nd-3rd century B. C., and the rest to a later period, we have at hand an evidence which points out the existence of several kings bearing the name Sātavāhana who can be placed between a span of nearly three hundred years, i. e. from 3rd century B. C. to about the 1st century B. C. This limit of 1st century B. C. of the Nevasa coins has been suggested on the basis of ceramic evidence at Nevasa. No Roman pottery like the amphora or the Red polished wares like the megarian and

* The numbers refer to the coins in Pl. VIII.

others, or wares like the rouletted have been associated with these 'Sātavāhana' coins at Nevasa. Thus these coins from Nevasa belong to a horizon which is pre-amphora and other foreign wares which can be put to a century or so prior to the beginning of the Christian era, and a couple of centuries after that.

Yet another important point emerges out of the study of these coins. The five coins came from Nevasa and the three published elsewhere came from Hyderabad. No coin of king Sātavāhana is reported so far from outside this area. Nevasa, as is well known, is close to Aurangabad-Paithan-Hyderabad area. All the coins, thus, suggest that the Sātavāhanas originated and ruled in this region in their early career.

The occurrence of the Nevasa coins in horizons prior to to the 1st century B. C. levels and the variety apparent in these (shape, fabric, legend and weight) and other coins indicating the existence of several kings bearing the name Sātavāhana, point to the earlier date for the origin of the dynasty. As such, in the light of this new evidence, the date of the origin of this dynasty advocated as 1st century B. C. (30 B. C.) by some scholars does not appear to be sound.

If this dating is accepted, then coin Nos. Pl. VIII. 1, 3, 4 and 7, which have a remarkable affinity to the coins of Siri Sātakaṇi I which occur in slightly upper levels at Nevasa, may be tentatively assigned to that Sātavāhana who was the son of Kaṇha and the father of Sātakaṇi I. It was so far believed that Satavāhana, the son of Krishṇa, did not come to throne. The Nevasa numismatic evidence suggests otherwise.

ON TWO SĀTAVĀHANA COINS

DINKAR RAO

I

A New Potin Coin of Gautamīputra Sātakarṇi

Gautamīputra Sātakarṇi was the greatest and most prominent of all the thirty Sātavāhana kings mentioned in the Purāṇas. The Sātavāhana Empire, which had suffered heavily from the powerful Śaka invasions of its territories, made a brilliant recovery during his reign by reconquest of the most of its lost domain. The advance and influx of foreign power in the south was finally arrested by either routing out or subduing the Śakas, Yavanas, Pahlavas, etc. and the empire was extended from sea to sea in the south. These glorious achievements of his reign, led to the christening of the Śaka Era of 78 A.D. as the Śālivāhana Era, which continues till to-day in Southern India and the Deccan.

Thirty-two coins of different varieties of this king, Gautamīputra, have been shown in the list of the published Sātavāhana coins by Rama Rao (Numismatic Notes and Monographs, No. 6). Most of them are of lead and only one is of potin, which is of "Elephant and Ujjain symbol" type. Besides this, no other type of potin coin of this Sātavāhana king is listed therein. After his brilliant and conclusive victory over Kshaharāta Nahapāna, he had also re-struck the silver coinage of the latter, with his own symbols, for circulation in his conquered regions.

I have recently found a potin coin of the usual "Elephant and Ujjain symbol" type, but with a Triratna symbol on the back of the elephant, the description of which is as follows :

Metal : Potin	Weight : 42 grs.
Shape : Round	Size : 0.7″

Obverse : Elephant facing to right with trunk upraised ; Circular Brahmi legend *Sātkaṇi*, beginning from IX, is readable and the rest of the letters are either partly truncated or off the flan.

Reverse : Ujjain symbol (with a pellet in its each orb).

(Pl. VIII. 9)

The one published potin coin mentioned in the aforesaid list has, on its obverse, an elephant facing to left with trunk hanging down. The elephant on my coin is facing to right

and its trunk is upraised. Besides, there is a Triratna symbol above the elephant, which is noteworthy.

Triratna symbol over the back of a lion and combined with other symbols on the obverse is known on the coins of Sātakarṇi II. But the reverse side of these coins have more than one symbol. The single Ujjain symbol on the reverse is found on the coins of Gautamīputra and later kings.

The letters of the circular legend *Sātakaṇi* on my coin are quite clear and the rest are badly cut off, being off the flan. There are traces of intermittent-letters: *Go, Pu* and *Ta* visible on the right and lower edge of the coin. These truncated letters, when restored may complete the legend, *Sātakaṇisa Raño Gotamiputasa*. I am, therefore, inclined to attribute this coin to Gautamiputra Sātakarṇi, the famous Sātavahana king. It is of a new type.

II

A Lead Coin of Pulumavi.

Shape : Round. Size : 0.7″ Weight : 80 grains.

Obverse : Chaitya of three arches with two horizontal straight lines below (the upper line thick and the lower one thin); legend in thick squat Brahmi characters. of which three letters *lu ma vi* are visible on the coin. *Lu* is to the left of the Chaitya and adjacent to the upper thick horizontal line, *ma* and *vi* are just below the horizontal lines.

Reverse : Ujjain symbol, each orb of which is represented by a solid ball, encircled by an outer ring; on the upper edge of the coin, two Brahmi letters, which appear to be *pulu*

(Pl. VIII. 10)

This coin was, as usual, picked up by me from a metal-scrap dealer of Hyderabad City. A similar lead coin was published[1] by V. V. Mirashi and attributed by him to the Sātavāhana king 'Hāla'.

Apart from the fact that both these coins are of lead and round in shape, a careful comparison of the two coins shows that they bear the same stamps. On the obverse, both the coins have the Chaitya of three arches, with a thick and a thin horizontal straight lines below; and on the reverse, they have the same type of Ujjain symbol. The form of Brahmi letters

1. *JNSI*, Vol. XIII, pp. 132-133.

on both of them is quite similar—thick and squat. Both the coins are of the same size (0.7") and differ only in weight. The present coin is heavier than the other by 10 grains ; but that is perhaps due to its better preserved condition.

The two letters that appear below the Chaitya on the obverse of the coin published by Mirashi have been read by him as *tisa*. The lower parts of these letters are truncated. Trace of an upper stroke of a letter preceding the letters *tisa* is visible on the coin and it has been conjectured by him as *sa*. He has thus tentatively restored the legend on the obverse as *Satisa*.

A careful examination of the letter, which has been read as *ti* by Mirashi on his coin and the letter *vi* on my coin, shows that they are identical in shape, size and form, except that the small horizontal bottom line of the letter on his coin is out of flan (so it appeared to be *ti*), which when restored, would be the same as the letter *vi*. As the letter *ma* preceding the letter *vi* is quite clear on my coin, the conjectural restoration of the letter *sa* by Mirashi appears to be incorrect. This letter *ma* is preceded by another letter *lu* on my coin, which is missing on the other coin, being out of flan. Similarly, the last letter *sa* is missing on my coin. Thus the obverse legend on both these coins may be restored as *lumavisa*.

On the coin published by Mirashi, there are three more letters to the right of the Chaitya on the obverse (they are out of flan on my coin), which perhaps escaped his notice. But they were noticed later by P. L. Gupta and rightly identified as *Rājño sa*.[1] After this, there is space for two letters, more and parts of their upper strokes are also visible. It is not difficult to surmise these two missing letters as *ri* and *pu* and restore the complete legend on the obverse as *Rājño Siri Puḷumāvisa*.

The reverse of both these coins also bears a legend of which only fragments are seen. The existing portion of the legend on Mirashi's coin has been read by him as *Sala* standing for 'Hāla', the name of Sātavāhana king, to whom he has attributed the coin. On my coin only two letters are visible and one of them is *lu*. The preceding letter appears to me more like *pa* than *sa* ; and in view of the obverse legend, I think it is a portion of the name *Puḷumāvi* and the entire legend might have been the same as on the obverse.

1. *JNSI*, Vol. XV, 181.

In view of the observations made above, it is clear that the present coin as well as the coin published by Mirashi belong to one and the same king, named *Puḷumāvi* and not to the king 'Hāla', as suggested by him.

The palæography of these coins differs widely from that of the legends usually found on the published coins of Vāśishṭhīputra Puḷumāvi and as such these coins may not belong to him. The thick squat form of the letters on these coins appears to be indicating a much earlier period, as observed by Mirashi (while attributing his coin to Hāla). There was a Sātavāhana king Puḷumāvi (Puḷumāvi I), who reigned about a century earlier than Vāśishṭhīputra Puḷumāvi and is mentioned in the genealogical list of Āndhra kings given by Purāṇas. He figures as the fifteenth king in the list of the Sātavāhanas given in the Matsya Purāṇa. He is also mentioned as 'Patumāvi' in Vayu Purāṇa and 'Patumān' in Vishṇu Purāṇa. He preceded the king Hāla by about two or three decades only. Probably, these coins were issued by him.

MAHĀRAṬHI AND ĀNAṄDA COINS

M. RAMA RAO

A few coins of these two families have been published by Rapson in the *BMC* (pp. 57-60). Forty-five coins, obtained from the excavations at Chandravalli, have been published in *Ancient India* (No. 4, 1947, pp. 290-295). I visited Chittaldurg and Chandravalli in June, 1954 and found many coins of these two families in the Local Antiquities Museum at Chittaldurg, said to have been mostly collected by Sri Srinivasa Jois. I prepared a list of all these coins for my own use. The late Dr. Altekar, saw this list and suggested that I may publish it so that it may be useful to scholars and students of ancient Indian Numismatics. He also asked me to discuss the importance of these coins in a paper. This paper of mine was published in the *JNSI*, Vol. XVI, Pt. II, pp. 197-204.

Of the coins published in the *BMC*, five (pp. 57-58) belong to the Mahārathis and six (pp. 59-60) to the Ānaṅdas. Seven of these coins have been illustrated (Pl. VIII, Nos. 233-236, G. P. 3 and G. P. 4). Of these, the second coin on p. 57 is a duplicate. Coins Nos. 235 and G. P. 3 are duplicates. The Mahārathi coins were from Chittaldurg-Chandravalli and the Ānaṅda coins from Karwar, S. Kanara.

Of the forty-five coins published in *Ancient India*, a few have been illustrated (Pl. CXXVII and CXXVIII). These include two Roman coins (Nos. 1 & 2), three Sātavāhana coins (Nos. 3-5), fourteen Mahārathi coins (Nos. 6-19), one Anaṅda coin (No. 20), four coins inscribed but of uncertain attribution (Nos. 21-24), and twenty-one uninscribed coins (Nos. 25-45). Of these, Nos. 8, 10, 16, 43, and 44 are mere duplicates of Nos. 6, 11, 17 and 42. Nos. 13 and 14 have partial or defaced legends. Nos. 29 and 30 are uninscribed and not of much importance.

The coins of the Chittaldurg Museum are in a good state of preservation and very interesting. I have included 26 of these coins in the appended list.

I am very thankful to Srī Srinivasa Joias and the Director of Archæology, Mysore State, for kindly permitting me to study the coins in the Museum and include them in the appended list.

The following is a comprehensive list of the Mahārathi and Ānaṅda coins mentioned above.

CHITTALDURG COINS

I. Sātavāhana Coins

No.	Size[1]	Weight[2]	Obverse	Reverse	Remarks
1	·6	1·610	Elephant with trunk upraised facing right. . . (*Puḷu*)*ma* (*vi*)…. .	Ujjain symbol.	*Anc. Ind.*[3] no. 3
2	·74	3·265	Indistinct animal as above. .. (*ñi*) *Sata*(*ka* …. .	Do	Ibid. no. 4
3	·7	2·568	Animal as above. …(*Si*)*r*(*i*) *Yaña* *S*(*a*)*ta*…	Do	Ibid. no. 5
4	·82	5·060	Defaced animal facing left. …..*sa kṇa*… .	Chaitya of six arches surmounted by crescent with tree-in-railing to right.	Ibid. no. 22
5	·7	2·265	Design defaced. …..*S*(*ā taka*…. .	Defaced.	Ibid. no. 23
6	·7	2·325	Defaced.	Ujjain symbol.	Ibid. no. 24
7	·6	……	Tree-in-railing.	Do	Ch. Mus. no. 25
8	·6	……	Indistinct symbol and legend.	Do	Ibid. no. 12

1. The size of each coin is given in inches.
2. The weight of coins published in *BMC* are in grains ; of all the rest, in grammes.
3. Op. cit., pp. 290-295.

II. Mahārathi Coins

No.	Size	Weight	Obverse	Reverse	Remarks
			A. BULL AND CHAITYA		
9	1·15	16·348	Bull facing left. *Sadakaṇa Kaḷalāya Mahāraṭhisa.*	Chaitya of six arches surmounted by crescent; triangle headed standard over double fish to left; Triratna over double fish symbol to right; Svastika to left and Śrīvatsa to left below.	*Anc. Ind.* no. 15
10	1·1	.....	Bull as above. *Sadakanaṁ Kaḷalāya Mahāraṭhisa.*	Chaitya of six arches surmounted by crescent; Nandipada to right; above double fish symbol; goad below it; Śrīvatsa above double fish symbol to left; Chaitya below.	Ch. Mus. no. 1
11	...	......	Bull facing right. *Sadakaṇa.... Mahāraṭhisa.*	Chaitya of six arches in centre; Nandipada above double fish to right; Triratna above double fish to left; Svastika and double *ya* below.	Ch. Mus. no. 27
12	...	......	Bull as above. *lāya Ma.*	Chaitya and other symbols as above.	Ibid. no. 14

13	1·0	......	Bull as above and full legend.	Chaitya as above ; Triratna above double fish to left and Svastika and double *ya* below.	Ibid. no. 3

B. BULL AND CHAITYA TREE

14	·8	......	Bull as above. *Mahāra.*	Chaitya of three arches surmounted by crescent with Triratna symbol above and tree-in-railing to right.	Ibid. no. 8
15	1·0	12 826	Bull facing left. *Sadakaṇa Kaḷalāya Mahāraṭhisa.*	Tree-in-railing ; Chaitya of six arches to right.	*Anc. Ind.* no. 6
16	1·07	10·995	Bull and legend as above. *dakanaṁ Kiḷalāya Mahāraṭh...*	Chaitya of six arches surmounted by crescent with tree-in-railing to right.	Ch. Mus. no. 9
17	...	......	Bull and legend as above.	Chaitya of six arches with tree-in-railing to right.	Ibid. no. 32
18	1·1	......	Bull as above. *...kaṇa Kaḷalāya Mahāraṭhisa.*	Solid Chaitya surmounted by crescent with tree-in-railing to right.	Ibid. no. 28
19	1·5	211·5	Bull as above. *(Sadakaṇa Kaḷalāya Mahāraṭhisa.*	Chaitya of six arches surmounted by crescent with tree-in-railing to right, traingle headed standard between them and a• symbol to right.	*BMC.* p. 57

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No.	Size	Weight	Obverse	Reverse	Remarks
20	1·1	10·197	Bull as above. *Sadaka(ṇa)kiḷalāya Mahārathisa.*	Do	*Anc. Ind.* no. 11
21	1·0	8·552	Bull as above. *Sadakaṇaṁ Kaḷalā(ya) (Mah)ārathisa.*	Do	Ibid. no. 7
22	...	......	Bull as above. *rathisa Sada.*	Chaitya of eight arches surmounted by crescent with tree to right.	Ch. Mus. no. 35
23	1·0	......	Bull as above and full legend.	Do	Ibid. no. 31
24	1·05	......	Bull as above and full legend.	Chaitya of ten arches surmounted by crescent with tree to right.	*BMC.* Pl. V, no. 233
25	1·0	......	Bull as above. *Sadakaṇa Kaḷalāya Mahā...*	Chaitya of ten arches with tree-in-railing to right.	Ch. Mus. no. 36
26	.95	7·309	Bull as above. *Sadakaṇa (Chuṭaka) ṅhasa (Mahāra)th(i)sa.*	Chaitya of six arches surmounted by crescent with tree to right.	*Anc. Ind.* no. 17
27	1·1	11·981	Bull as above. *Sadakaṇa Kaṅsa Mahārath(i)putasa.*	Chaitya of five arches surmounted by tree, indistinct symbols to left and to right.	Ibid. no. 18

28	1·1	......	Bull as above. *kaṇa Mahārathisa.*	Chaitya of eight arches surmounted by crescent with tree to right.	Ch. Mus. no. 29
29	1·0	6·905	Bull as above. ....*(Ma)harathi...*	Chaitya of three arches surmounted by crescent with tree-in-railing to right and symbols below.	*Anc. Ind.* no. 19

C. Bull and Tree

30	...	......	Bull as above. *Sadakaṇa Ka(........)*	Tree-in-railing with Nandipada to right and triangle headed standard to left.	*BMC.* Pl. VIII, no. 234

III. Kura Coin

·31	·93	7·040	Elephant facing left with bow and arrow before. *(Raño).....ya.....*	Chaitya of three arches with tree to left in railing.	*Anc. Ind.* no. 21

IV. Ānaṁda Coins

32	1·15	210·4	Chaitya of eight arches. *(Ra)jño* *Chuṭukulānaṁdasa.*	Tree with Nandipada to right and double *ya* over a symbol to right.	*BMC.* Pl. VIII, GP. 2.
33	1·25	16·848	Chaitya of six arches. *Rajño* *Chuṭukaḷemnaṁdasa.*	Tree-in-railing with Nandipada over Svastika to left and double *ya* over triangle headed standard to right.	*Anc. Ind.* no. 20

No.	Size	Weight	Obverse	Reverse	Remarks
34	1·05	250	Chaitya of eight arches. *Rajño Mulānadasa.*	Tree with double *ya* symbol to right and Triratna symbol over another to left.	*BMC.* Pl. VIII, no. 236
35	1·1	248·3	Chaitya as above. *Rajño Mulānadasa.*	Do	Ibid. GP. 4
36	1·0	......	Do	Tree with triangle headed symbol to left and Triratna symbol to right.	Ch. Mus. no. 5
37	1·0	......	Do	Tree in railing with triratna symbol to left.	Ibid. no. 7
38	1·0	......	Chaitya of six arches. *Mulānandasa.*	Tree-in-railing.	Ibid. no. 4

V. Uninscribed Coins

A. Bull and Chaitya

No.	Size	Weight	Obverse	Reverse	Remarks
39	·43	·710	Bull facing left with crescent above.	Chaitya of six arches surmounted by crescent.	*Anc. Ind.* no. 39
40	·8	......	Do	Chaitya of six arches.	Ch. Mus. no. 24
41	·5	......	Do	Chaitya as above with symbols on either side.	Ibid. no. 16

42	·59	1·575	Humped bull facing left.	Chaitya of six arches surmounted by crescent with triangle headed standard to left and Svastika to right.	*Anc. Ind.* no. 37
43	·5	......	Do	Chaitya of six arches surmounted by crescent with Svastika to left and Triratna symbol to right.	Ch. Mus. no 11
44	·6	......	Do	Chaitya of six wide arches with Svastika to left.	Ibid. no. 18
45	·46	·915	Humped bull facing right.	Jumble of Chaitya surmounted by crescent and tree-in-railing.	*Anc. Ind.* no. 41
			B. Bull and Tree		
46	·54	1·05	Humped bull facing right with symbols below.	Tree-in-railing.	*Anc. Ind.* no. 45
47	·54	1·705	Humped bull facing right.	Tree-in-railing with Nandipada to right.	Ibid. no. 42
48	·6	......	Do	Tree-in-railing with Triratna symbol to right.	Ch. Mus. no. 10
49	·5	......	Do	Tree as above with Triratna symbol to left.	Ibid. no. 23

No.	Size	Weight	Obverse	Reverse	Remarks
50	·5	......	Humped bull facing right.	Tree-in-railing with Triratna symbol above.	Ibid. no. 22
			VI. Miscellaneous Types		
51	·6	......	Chaitya of three arches with wavy line below.	Triratna symbol.	Ch. Mus. no. 17
52	·65	2·755	Chaitya of six arches.	Do	*Anc. Ind.* no. 32
53	·6	2·336	Chaitya as above with a pellet in each arch.	Do	Ibid. no. 34
54	·58	2·597	Chaitya of eight arches.	A new symbol.	Ibid. no. 35
55	·7	......	Chaitya of ten arches surmounted by crescent.	Triratna symbol.	Ch. Mus. no. 12
56	·64	3·150	Nandipada.	Nāga symbol.	*Anc. Ind.* no. 25
57	·64	2·650	Do	Chaitya of three arches surmounted by crescent.	Ibid no. 27

58	·55	2·558	Nandipada.	Chaitya of six arches surmounted by crescent pellet in each arch.	Ibid. no. 28
59	·75	5·950	Do	Chaitya of eight arches.	Ibid. no. 31
60	·71	5·305	Do	Chaitya as above surmounted by crescent.	Ibid. no. 26
61	·5	......	Triratna symbol.	Triratna symbol.	Ch. Mus. no. 19
62	·5	......	Naga symbol.	Do	Ibid. no. 16
63	·54	2·531	Defaced.	A new symbol.	*Anc. Ind.* no. 36

A RARE COIN OF SEBAKA DYNASTY

DINKAR RAO

[PL. VIII. 11]

The Sebaka dynasty is known only from their coins, unearthed during the last two decades. These coins have been brought to light by V. V. Mirashi from the collections of H. Kaus of Hyderabad and the Hyderabad Archæological Museum and have been published in the past issues of this Journal.[1]

Judging from the Brāhmī characters found on the earliest coin discovered, Mirashi has surmised the existence of this dynasty as early as circa 3rd century B.C. (i.e. the period of the decline of Mauryan Empire and the rise of the Sātavāhanas). But, A. S. Altekar was not inclined to accept this view,[2] since some characters similar in form were found in the inscriptions of the later period also, and had reviewed this date to circa Ist century B.C. (i.e. prior to the invasion of the western part of the Sātavāhana Empire by the Kshaharāta Nahapāna). He was of opinion that the kings of this Sebaka dynasty might have been one of the feudatories of the Imperial Sātavāhanas and their home province was probably in the region of Central or Western India. However, since the coins of this dynasty were discovered only in the regions of the former Hyderabad State, I am inclined to think that their province or principality might have been somewhere in the central part of the Deccan.

The earliest coin[3] of the Sebaka dynasty, published by Mirashi, is of copper, square in shape, on the obverse of which there is the figure of a bull facing right, Svastika symbol in the field, and the legend *Ramṇo Sebakāsa* in early Brāhmī characters, and on the reverse, Nāga and Nandipada symbols. It may be mentioned here that among the Sātavāhana coins published so far, we find the bull symbol only on one of the coin types of Sātakarṇi I, who flourished in the early part of the 2nd century B.C. Thus, it may be inferred that this Sebaka king was a feudatory

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1. *JNSI*, Vol. VII, p. 94 and Vol. VIII, p. 107.
2. Ibid., Vol. VII, p. 96
3. Ibid., Vol. VII, p. 94

and a contemporary of Sātakarṇi I. This king is said to be the earliest and founder of the Sebaka dynasty. If so, the existence of the Sebaka dynasty may well be traced back to circa 2nd century B.C.

A coin of this very type, with identical legend and symbols, is in the Hyderabad Museum, a photograph of which is exhibited in a show case, hung on a wall of the Numismatic section.

The other coin, published by Mirashi,[1] is of lead, round in shape, with the figure of a young horse facing left, a wheel symbol (probably representing a Dharmachakra) in front of the animal, a double trident or Brahmi letter *yya* in the field above the back of the horse, bearing the legend *Pakās Śiva Sebakāsa* in later Brāhmī characters and attributed to a much later king of this dynasty. Its reverse has a Hill (Chaitya) symbol in a double lined square border with a wavy line in between the double lines of its base. Its perfect round shape, improved and later form of Brāhmī characters of the beautifully inscribed legend, and neatly drawn figure of the horse, indicate much later period, which has been ascribed by him to circa 3rd century A. D. Some similar coins but of square shape were discovered during archæological excavations at Kondapur (about forty miles from Hyderabad city), where many ancient relics of the Sātavāhana age have been unearthed by the Archæological Department of the erstwhile Hyderabad State.

Thus, the coins of only two kings of Sebaka dynasty, as mentioned above, are known so far. A gap of nearly three centuries and more, occuring between the reigning periods of these two kings, identified only from their coins, indicates that many more kings of this dynasty might have flourished during this long intervening period Further discoveries of their coins may reveal the identity of some more kings of this dynasty.

I have recently found a potin horse type coin of this Sebaka dynasty, in a well preserved condition, resembling the lead coin of 'Prakāśa• Śiva Sebaka' published by Mirashi. This coin was picked by me, as usual, from the metal-scrap dealers of Hyderabad city. Although its exact find-spot could not be known, still it cannot be far off

1. *JNSI*, Vol. VIII, p. 107

from the suburbs of the city, from where these metal scraps usually come to the city dealers. The description of the coin is as follows :

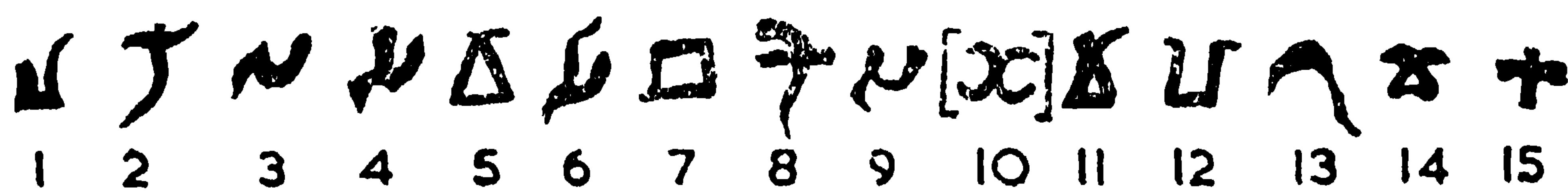
Metal :	Potin	Weight :	22 grs.
Shape :	Round and thin	Size :	0·9″

Obverse : A neat and well drawn figure of a young horse facing left, a wheel symbol in the field above the back of the animal ; circular legend in later Brāhmī characters beginning from VI read tentatively as :
Pakasa Sira Sabakasa (X) Mahāyāmaka(sa)

Reverse : In a square border of double lines (of which the base lines are only visible) a Chaitya of three arches with a number of dots in its each arch ; a wavy line below the Chaitya in between the two base lines of the square border. **(Pl. VIII. 11)**

The thinness of this coin and its low weight, considering its size, are its speciality and noteworthy features.

Since some characters of the legend on this coin are peculiar in shape and partly truncated, there is difficulty and confusion in reading them correctly. I give below an eye-copy of the legend and my tentative reading of each letter therein.



The upper part of the first two letters are truncated. The letter No. 8 is peculiarly inscribed and is rather faint on the coin. The last two letters (14 & 15) are smaller in size than the rest and their upper portion is cut, being off the flan. As such my tentative reading is open to doubts.

The first letter is read by me as *pa*. The usual form of the letter *pa* of this age has its left vertical line curved (as seen in the Ikshvāku inscriptions of Nagarjunasagar), while here the right vertical line of the first letter is curved upward. This, I think, is perhaps a mistake of the engraver of the die. The engraver's mistakes are evident from the varying shapes of the letter *sa* occuring at four places (3-4-6-9) in the legend and of letter *ka* (at 2-8-15). It is further evident from the

smaller size of the last two letters (14-15), although there was enough space available. This shows that the engraver was not well acquainted with the calligraphy. Considering this aspect, I guessed the first letter as *pa*. Alternatively, it can be conjectured as *ha* or *la*, but it does not give out any meaningful word. So I prefer to read it as *pa*. The second letter has its upper portion truncated. Still, the vertical line has appeared a little, though faintly, above the horizontal stroke and as such it may be read as *ka*. The letter No. 4 is a clear *sa*. Thus the word formed of these three letters is *Pakasa*, a corrupt form of *Prakaśa*. The next four letters (4 to 7) are clear and read as *sa-va-se-ba*. The eighth letter has a peculiar curving shape and is rather thin and faint on the coin. It appears to be crammed for want of enough space. Perhaps, the engraver of the die missed it first and afterwards realising his mistake, he tried to insert this letter, somehow, in the small space available, giving it a peculiar artistic shape. The vertical line of this letter *ka* is rather thin and comes curving down from above, in a peculiar manner, with a dot at its upper end and the cutting horizontal stroke has touched the letter *ba* to the left and *sa* to the right. So I read this letter as *ka*. This sort of *ka* is also found, in the legend *Sātakarṇisa*, on some types of later Sātavāhana coins. The letter No. 9 is clear *sa*. The resemblance of my coin with that of the Sebaka coin of 'Prakāśa Śiva' published by Mirashi led me to complete the reading of the letters 4 to 9 as '*Siva Sebakasa*'. The tenth letter is unidentified and I think it might be only a symbol. The next two letters (11-12) are clearly read as *Mahā*. The letter No. 13 is *ya* with its right arm stretched a little downwards, which is perhaps again a mistake of the engraver. It may be read as *gra* but compound letters were not in vogue then.* The small letter (No. 14), with its upper part cut, may be read as *ma* and the next small letter (No. 15) almost resembling the arithmetical plus sign (+), is read as *ka*. The word thus completed becomes *Mahāyamaka*. In this manner, I complete the reading of the legend, tentatively, as *Pakasa Siva Sebakasa (X) Mahāyāmaka (sa)*.

The horse type lead coins are known to have been issued by the following Sātavāhana kings and their feudatories, with variations of symbols on the obverse as well as reverse :

1. Meghaswāti

Obverse : Horse facing right. Square shaped coin. Uncertain.

(*BMC*, p. 28, Pl. V. Gp. 5)

2. **Gautamīputra Sātakarṇi.**

Obverse : Horse facing right with crescent above.
Reverse : Obliterated. (Round shape).
(*ECWI*, No. 12).

3. **Vāsishṭhīputra Puḷumāvi**

Obverse : Horse facing left with double *ya* symbol above and spherical object below the mouth of the animal.

Reverse : Chaitya of six arches and tree to the left. (Round shape). (*JJDHC*, II. p. 80. No. 76).

4. **Śrī Yajña Sātakarṇi**

Obverse : Horse facing left with crescent above.
Reverse : Ujjain symbol. (Round shape)
(*BMC*, p. 38. Pl. VI. 150)

5. **Chandra Sātakarṇi**

Obverse : Horse facing left.
Reverse : Ujjain symbol. (Round shape)
(*BMC*, p. 33, Pl. VI. 130).

6. **Yasasa of Mahisha Dynasty**

Obverse : Horse facing right with Svastika and tree-in-railing symbols in the field above, within a double lined rectangular border.

Reverse : Chaitya of ten arches with a crescent above and a wavy line below.
(*JNSI*, XI. p. 2).

7. **Simha Talāvarasa**

Obverse : Horse facing left, double *ya* or double trident symbol in the field above.

Reverse : Three arched Chaitya with a wavy line below, inside a double lined rectangular border.
(*JNSI*, XV. p. 117).

From the descriptions of the known horse type coins, given above, it will be evident that the Sātavāhana kings, besides their usual elephant and Chaitya types, had adopted the horse type also for their coins and later some of their feudatories even imitated this type for their own coinage. It is well known that the Imperial Sātavāhana kings allowed, some of their powerful feudatories, the privilege of minting coins in their own names, for circulation in their respective regions.

The horse type adopted by the Sebaka king 'Prakāśa Śiva' for his coinage and the later form of Brāhmī characters found on them, tend to show that he might have been one of the feudatories of the later Sātavāhana kings (probably Śrī Yajña or Chandra Satakarṇi, whose coins have also similar horse symbols on them). The Purāṇas mention that after the Āndhras (Sātavāhanas), their servants (Āndhra Bhṛityas) will rule their provinces. The dynastic name 'Sebaka', a corrupt form of the Sanskrit word *Sevaka*, also suggests the same.

It is known that after the decline and dismemberment of the Sātavāhana Empire, following the death of Śri Yajña Sātakarṇi, scions of the Imperial family were ruling at different parts of the Empire in the early part of the third century A. D. and were later extirpated by new dominant powers, which formerly owed allegiance to the Sātavāhanas. Wide regions of Madhya Pradesha were occupied by the Vākātakās. The Ābhīras occupied north-west part of the Empire (Aparānta and North Konkan). The Ikshvākus ruled over the country in the south-east, round about the mouth of river Krishna (Vijayapuri in the Nagarjunasagar valley). The Chuṭukulas had the trans-Krishna regions (parts of Mysore and South Konkan, etc) in their occupation. The Kuras were ruling over the Kolhapur region and Brihatpālāyanas in the Masulipatam area. Thus, it is probable that the part of the Sātavāhana Empire, thus left out (i. e. central part of the Deccan), might have been possibly in the occupation of the Sebakas. The find-spot of the coins of this dynasty, traced so far (Kondapur and suburbs of the Hyderabad City) also indicates the same.

The coin which I publish here may well be compared with the lead coin of 'Prakāśa Śiva', published by Mirashi. Both these coins are round in shape and have, on their obverse, an exactly similar figure of a horse, facing left, neat and well drawn. The wheel symbol, which is found in front of the horse on his coin, is seen in the field above the animal on my coin. The double trident or Brāhmī double *ya* symbol in the field above the back of the animal on his coin, is not found on mine but there is another symbol at No. 10 in the circular legend, as mentioned earlier, on my coin. As only the right side of the reverse die has come out on his coin, one arch of the Chaitya is visible on it, whereas on my coin, more portion of the die has come out and two arches of the Chaitya and the lower part of the upper arch also can be clearly seen. Parts of the double lined square

border and the wavy line are visible on both. Thus the reverse side of both these coins are identical. My coin is of Potin metal, which is its speciality, while his coin is of lead. However, their general resemblance is beyond doubt except for some slight differences.

The circular legend on the obverse of the coin published by Mirashi is read by him as *Pakāsa Siva Sebakāsa*, which is also readable on my coin. There is an unidentified letter resembling the English letter '*X*' immediately after the above-mentioned letters on my coin (which I think is only a symbol); after this there are five more letters, which I have tentatively read as *Mahāyāmaka*.

Some lead coins with Svastika symbol on their obverse, bearing the legend *Sumahāyāmakasa*, have also been published in this journal by Mirashi.[1] The find-spot of these coins is shown as Kondapur. The reverse of these coins is much defaced and only on one of them two knobs, probably of Ujjain symbol, are visible. In view of the Svastika symbol appearing on these coins, which is also found on some published coins of the kings of Mahisha dynasty, he is of opinion that the issuer of these coins 'Sumāhāgrāmaka' might have been some unknown later king of the Mahisha dynasty, but he has also expressed doubt about this attribution. I think, the letter *sa* with which this name begins, might be a genitive affix of the truncated preceding word and if it is removed the name of the king would be read as *Mahāyāmaka*, which is also found on my coin, along with the name of 'Prakāśa Śiva Sebaka'.

However, the name of this king 'Mahāgāmaka' appearing on the obverse of my coin, in association with the name of the Sebaka 'Prakaśa Śiva' apparently may lead to confusion and doubt, as to whether this coin was a common issue of two separate kings of different dynasties. There are some instances of the coins of the foreign invaders of India, viz. Śaka-Pahlava kings, on which the names of the two kings belonging to the same dynasty are found; the name of the superior king appearing on the obverse and that of the subordinate king on the reverse, as for example, Azes and Azilies, Vonnones and Spalahores, Spalaris and Spalagadama etc. But, as far as I know, there is no instance of a coin bearing the names of two kings of different dynasties appearing on the obverse alone, which I think is highly improbable.

1. *JNSI*, Vol. XII. p. 92. Pl. VIII, Nos. 10-13.

In view of the reasons given above, I am inclined to think that *Mahāgāmaka* may not be the proper name of a king, but only a title, like *Mahārathī*, *Mahāsenāpati* etc. and is a corrupt form of the Sanskrit word *Mahāgrāmaka*. Ordinarily, the word *Grāma* means a village and *Grāmaka*, the head of a village. But, in the administration of Sātavāhana Empire, *Gāma*[1] was a sub-division of a District and the officer-in-charge of a *Gama* was *Gamik*. As such, *Mahāgāmaka* would mean the head of a region or principality comprising a group of *Gāmas*, or roughly a province. Thus, *Mahāgāmaka* can as well be construed a title. It is known that the titles of *Mahārathi*, *Mahasenāpati* and *Daṇḍanāyaka* were conferred by the Imperial Satavāhana kings on some of their powerful feudatories, who were allowed to mint their own coins. Similarly, *Mahāgrāmaka* might have also been a title conferred by the later Satavahana kings. While the former titles *Mahārathi* and *Mahāsenāpati* related to the army, the title *Mahagrāmaka* was probably concerned with the civil administration of a province or a region of the Satavāhana Empire.

I, therefore, suggest that the issuer of the coin, 'Prakāśa Śiva Sebaka' had this title of *Mahagramaka*, as a feudatory, from one of the later Satavahana kings, which he got inscribed on his coin along with his proper and dynastic name. Probably, he was *Mahāgrāmaka* of a region in the central part of the Deccan (which included principally Kondapur and suburbs of Hyderabad) and after the extinction of the Imperial Sātavāhana dynasty, he might have declared independence in his own region, just as his neighbour Ikshvākus did in their own province, perhaps about the same time or a little later [2]

However, this coin of Sebaka king 'Prakāśa Śiva' is rare and unique. Its thinness and low weight (considering its size) add to its rarity and make it all the more interesting to the numismatists. Besides, this is the first horse type coin, in potin metal, of that age.

1. *A Comprehensive History of India*, Vol II, edited by K. A. N. Sastri, p. 318.

2. [See also the next article in this Journal, D. C. Sircar, "Alleged Coins of King Sumahāgrāmaka", pp. 168-171—*Editor*.]

ALLEGED COINS OF KING SUMAHĀGRĀMAKA

D. C. SIRCAR

In a small note appearing in this journal, Vol. XII, 1950, pp. 92-93 and Plate, V. V. Mirashi published four lead coins which he attributed to a king named Sumahāgrāmaka. The coins are stated to have been discovered in the course of excavations at Kondapur, a village in the Kalabgur Taluk of the Medak District of the old Hyderabad State and Mirashi received them from Khwaja Muhammad Ahmed, then Director of Archaeology, Hyderabad. A similar note on the coins was also published by Mirashi in the *Numismatic Series*, No. 7, 'Coins of King Sumahāgrāmaka from Kondapur Excavations', Hyderabad Museum, 1950, pp. 1-2 and Plate.

The coins are roundish in shape (1″ or 1·05″ in diameter). The weight of the four coins is recorded as—162, 214, 168 and 142 grains. They have a Svastika on the obverse with a *ha*-like symbol above and the legend running round it. Of the symbols on the reverse which is more or less rubbed off on all the specimens, only traces of the Ujjain symbol are noticed in some cases. The legend is only partially preserved because the flans of the coins were smaller than the die.

The preserved portions of the incomplete legend were read on the four specimens as follows: (1) *Samahagāma* [*kasa*], (2) *Mahagāmakasa ma*[*ha*], (3) [*Sa*]*mahagāma*, and (4) *Samaha*. The characters of the legend were assigned to the third century A. D. in the note published in the journal and to the second or third century A. D. in the *Numismatic Series*, No. 7. The legend *Samahagāmakasa maha*, as made out by Mirashi, was taken by him to stand for Sanskrit *Sumahāgrāmakasya maha*.... and translated as '[This coin is] of Sumahāgrāmaka Maha...' He discussed the question whether the concluding letters of the legend can be read as *Mahasa* (Sanskrit *Mahisha*) and whether the issuer could have belonged to the Mahisha dynasty, the existence of which was inferred from the legend on certain other coins read and interpreted by him as *Saga-Māna-Mahasa*[*sa**] (Sanskrit *Śaka-Māna-Mahishasya*), '[This coin is] of Saka Māna of the Mahisha dynasty.' But he expressed his doubt that the letter after *maha* at the end of the legend on the second c the four Kondapur coins, referred to above, may not be *sa*.

While expressing our doubts about the ascription of the coins to a king named Sumahāgrāmaka, we had occasion to suggest the reading *Mathari-putasa* (Sanskrit *Māṭharī-putrasya*) for what has been read by Mirashi as *maha...* at the end of the legend on the Kondapur coin in question.[1] Mirashi, however, complained that we merely expressed our doubt about the existence of king Sumahāgrāmaka but did not offer any constructive suggestion. Thus he says, "Dr. Sircar does not explain how he would explain *Samahagāmaka*. Is it a territorial designation? Have we come across a similar one anywhere else? In the absence of any clue to the correct interpretation of this legend, why not take it tentatively as a coin of Sumahāgrāmaka, though the name may appear rather queer?"[2]

Our difficulty was that we were not prepared to go far without examining the coins to our satisfaction. Recently we had an opportunity of examining some plaster casts of the coins in the Hyderabad Museum and are now in a position to offer our suggestions regarding the reading and interpretation of the legend on the Kondapur coins. Our thanks are due to A. N. Lahiri, who visited the Hyderabad Museum in 1959 and prepared plaster casts of a number of coins which he was good enough to place at our disposal. These include many of the coins published by Mirashi from time to time.

On a careful examination of the illustrations and casts of the Kondapur coins in question, we find that the legend reads: *Mahagāmakasa Maṭhari-putasa ...sa* (Sanskrit *Mahāgrāmikasya Māṭharī-putrasya ...sya*), '[This coin is] of *Mahāgrāmika* Māṭharī-putra...' Unfortunately the personal name of the issuer of the coins, who enjoyed the official title *Mahāgrāmika* and the metronymic *Māṭharī-putra* (i.e. the son of a lady born in a family belonging to the Māṭhara *gotra*), is not preserved in any of the specimens.

The official designation *Mahāgrāmika* (literally, 'the great *Grāmika* or the head of a village', i. e. 'a chief of the *Grāmikas*') occurs in early South Indian records. Thus the Nagarjunikonda inscription of the time of Ābhīra Vasusheṇa mentions Kauśikī-putra Śivaśepa of the Peribideha family as enjoying the designations *Mahāgrāmika, Mahātalavara* and *Mahādaṇḍanāyaka*,[3] while *Grāmika* meaning 'the head of a village' is well known from numerous instances of its

1. *JNSI*, Vol. XVIII, p. 10
2. Ibid., p. 123.
3. *Indian Archaeology*, 1958-59, p. 8; *Ep. Ind*, Vol. XXXIV, p. 197.

occurrence in epigraphic and literary sources. The expression *mahāgrāmika* means an officer having jurisdiction over a territorial unit called a *mahāgrāma* or a group of villages each under a *Grāmika*. We know of the use of the word *Mahāgrāma* or *grāmāhāra* in early South Indian inscriptions. Thus an inscription of Kadamba Bhogivarman (sixth century A. D.) mentions Tagare-mahāgrāma which consisted of twenty-four *pallīs* and was situated in the Tagare *vishaya* (district),[1] while the *grāmāhāra* of Sahalāṭavī consisting of twelve villages is mentioned in an earlier inscription.[2] *Mahāgrāma* was thus the sub-division of a district, another name for which was *rāshṭra* as known from South Indian records. We have the *Rāshṭra-kūṭa*, 'head of a *rāshṭra*', an expression coined on the analogy of *Grāmakūṭa*, 'head of a village', in numerous inscriptions.[3] 'Some other official designations of a similar import are *Rāshṭramahattara*, *Rāshṭrin* and *Rāshṭrika*.[4]

The issue of coins by a subordinate ruler who was the governor of the sub-division of a district is well known from other instances offered by early South Indian numismatics. Thus there are coins[5] bearing the legend *Sadakana-Kaḷalāya-mahārathisa* (Sanskrit *Sātakarṇi-Kaḷalāya-mahārāshṭriṇaḥ*), '[This coin is] of Sātakarṇi-Kaḷalāya, the *Mahārāshṭrin*'. The designation *Mahārāshṭrin* (literally, 'the great *Rāshṭrin*', i. e. 'a chief of the *Rāshṭrins*') is derived from *Rāshṭrin*, i. e. the ruler of a *rāshṭra* which, as indicated above, was the sub-division of a district or a territorial unit consisting of a group of villages, similar to a *mahāgrāma*. It appears that the *Mahāgrāmika* who issued the coins under study and the other issuers of coins bearing subordinate titles were ruling semi-independently when the Sātavāhana power was fast declining.[6]

In this connection, we may also refer to the coins issued by persons enjoying the official designation *Mahāsenāpati* (literally, 'the great *Senāpati* or commander of forces,' i. e. 'a chief of the *Senāpatis*') who was probably the military governor of a district or a sub-division. Mirashi published some coins on which the legend has been read and interpreted by

1. *The Successors of the Satavahanas*, p. 305.
2. Ibid., pp. 249-50.
3. See, *e. g.*, the Ellora plates of Dantidurga (*Ep. Ind.*, Vol. XXV, pp. 25 ff).
4. *Rashtrika* occurs as *Rathika* in Prakrit epigraphs, *e. g.*, the Hirahadagalli plates (*Ep Ind* , Vol. I, pp. 1 ff.). For *Rashtramahattara*, cf. the passage *Rāshtra-grāma-mahattara* in the Kavi plates (*Ind. Ant.*, Vol. V, pp. 114 ff.). For *Rāshtrin*, see below.
5. Rapson, *Catalogue of the Coins of the Andhra Dynasty*, *etc.* pp. 57-58
6. For coins issued by a *Talavara* or *Mahātalavara*, see *JNSI*, Vol. XV, pp. 117-19.

him as *Mahāsenāpatisa Bharadaja-putasa Saga-Māna-Chuṭu-kulasa* (Sanskrit *Mahāsenāpateḥ Bharadvāja-putrasya Śaka-Māna-Chuṭu-kulasya*), '[This coin is] of *Mahāsenāpati* Bharadvāja-putra Māna, the Śaka, who belonged to the Chuṭu family.'[1] As we have already suggested, the correct reading of what had been read as *Bharadaja* is *Bharadaji* (Sanskrit *Bhāradvājī*)[2] while the interpretation of *Saga-Māna-Chuṭu kula* as 'Śaka Māna of the Chuṭu family' was characterised by us as utterly unconvincing.[3] We are now trying to show elsewhere[4] that the legend correctly stands for Sanskrit *Mahāsenāpateḥ Bhāradvājī-putrasya Saṅgamānāṁ* (or *Saṅgrāmāṇāṁ*) *Chuṭukulasya*, '[This coin is] of *Mahāsenāpati* Bhāradvāji-putra Chuṭukula (the Sanskritised form of a Dravidian personal name) belonging to the Saṅgama or Saṅgrāma dynasty.' In the same connection, we are also trying to prove that what Mirashi has read on some coins of the same person as *Saga-Māna-Mahasa*[*sa**] and interpreted as *Śaka-Māna-Mahishasya*, '[This coin is] of the Śaka [king] Māna of the Mahisha dynasty,' really stands for *Sagamāna Mahase*[*nāpatisa**]..., (Sanskrit *Saṅgamānāṁ* [or *Saṅgrāmāṇāṁ*] *Mahāsenāpateḥ*...), '[This coin is] of *Mahāsenāpati*... belonging to the Saṅgama or Saṅgrāma dynasty.' Since our article on this subject is appearing elsewhere, we refrain from discussing here the arguments in favour of our views in detail.

It is, however, clear that there is no basis for the existence of a king named Sumahāgrāmaka. Similarly, the theory regarding the rule of the kings of a Śaka Mahisha dynasty over the southern parts of the old Hyderabad State seems to be based on the erroneous reading and interpretation of the certain coin-legends.

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1 *JNSI*, Vol. XV, pp. 115 ff.
2. *JNSI*, Vol. XVIII, p. 7.
3. Ibid., p. 8.
4. [It is hoped that the valuable article of the author will be published shortly.—Editor.]

SOME OBSERVATIONS ON CHANDRAGUPTA I—KUMARADEVI COIN TYPE

UPENDRA THAKUR

The attribution of the coins bearing the effigies and names of Chandragupta and Kumāradevī on the obverse and the inscription *Lichchhavayaḥ* on the reverse, is still a controversial issue. That these coins commemorate the marriage of Chandragupta I and Kumāradevī and the union with the Lichchhavis is certain and beyond dispute. The controversy is with reference to the monarch who struck this type of coins. It is quite natural to suggest that a coin is invariably the issue of a person or persons whose name or names appear on either the obverse or the reverse side of it. But, as Allan pointed out, there were certain difficulties in the way of attribution of the aforesaid coins to Chandragupta I, though his name along with those of his queen and relations by marriage, is inscribed on them.

Allan thought that the so-called Chandragupta coins were really issued by Samudragupta in commemoration of his father's marriage and his own Lichchhavi descent—an episode which consistently found a place of pride and honour in the Gupta epigraphs. In other words, it was Samudragupta who started the Gupta currency by striking the Standard gold coins on the model of the late Kushāna coinage.[1]

Altekar, however, refuted the arguments of Allan and contended that the Chandragupta-Kumāradevī coins were issued by Chandragupta I and not by Samudragupta.[2]

Most of the scholars, while recording their views on this controversy, have supported Allan's stand. V. S. Agrawala suggests that the legend *Lichchhavayaḥ* be construed as *Lichchhavayaḥ jayanti*, i e., "the Lichchhavis are victorious". Accordingly "*Lichchhavayaḥ* in that position give the name of commemorators" and "the numismatic evidence is predominently in favour of the issue being a commemorative medal struck sometime in the reign of Samudragupta himself."[3] The suggestion is no doubt quite interesting keeping in view the

1. Allan, *BMC, Gupta Kings etc.*, p. lxiv-lxviii ; lxxiii-lxxiv.
2. See *Bayana Hoard Catalogue*, Intro. XI-lii. Also see his *Coinage of the Gupta Empire*, 26-32 ; *JASB*, 1937, (*NS*), pp. 105-11
3. *JNSI*, Vol. XIX, p. 139.

name of the commemorator, but numismatic and historical evidences warrant against such assumptions.[1]

The following points may be taken in to consideration before ascribing these coins to Samudragupta :

(i) The expression "चन्द्रगुप्तस्यपुत्रस्य लिच्छविदौहित्रस्य श्रीचन्द्रगुप्तस्य" in the Allahabad Pillar Inscription[2] unequivocally establishes the connection between the Guptas and the Lichchhavis in the times of Chandragupta I which is supported by the legend *Lichchhavayaḥ* on the coins of Chandragupta I. It further supports the contention that this amalgamation of the two territories was effected during the time of Chandragupta I and not Samudragupta as some scholars would have us believe. Prabably the Lichchhavi kingdom was presented to Chandragupta on the occasion of his marriage depicted on the obverse side of his coin.

(ii) Scholars believe on the basis of a statement "तुल्य-कुलज-म्लानाननोद्वीक्षि (ति:)..." given in the Allahabad Pillar inscription[3] that Samudragupta had to face some sort of trouble in the capital as well as in the neighbouring regions. But we do not know whether this trouble came from his brothers' side during his time. The better possibility is that it came during the time of his father when he nominated him as his successor, rejecting the cases of the rest, and it was because of the apprehension of this trouble, brewing inside the palace, that Chandragupta acted with promptness in announcing the name of Samudragupta as his successor in the presence of his courtiers.

The term "म्लान..." may also be interpreted in the following way : Chandragupta nominated Samudragupta as his successor because the latter, besides being his bravest son, was also a *Lichchhavi-dauhitra* whose maternal grand-father or relations had played a very vital part in the rising fortunes of the Guptas—an episode which any conscientious and ambitious monarch would have ill-afforded to ignore in the larger interests of his newly acquired empire. The nomination of Samudragupta, therefore, went a long way in cementing this new alliance, to the best satisfaction of the Lichchhavis. On the other hand, it made his brothers and other rivals sorry, for their claims were ignored. As they were not in a position to react violently, they kept calm and contented with their lot. Hence, the use of the term "म्लान".

1. Ibid., p. 139.
2. Sircar, *Select Inscriptions*, vol. I, p. 255.
3. Ibid., p. 255.

The great pride with which Samudragupta calls himself a *Lichchhavi-dauhitra* clearly explains the fact that besides political fortunes, the blood relation with such a great republican tribe with a brilliant past tradition gave the Guptas a distinct social standing which could not have otherwise been possible for them to attain for a long time to come. It also speaks of his being *drāmuṣyāyaṇa*, and hence entitled to rule over the amalgamated kingdom of the Lichchhavis and the Guptas, which other princes, not having Lichchhavi-blood, did not have.[1] In view of the above considerations, the argument of S.V. Sohoni, that "it would be an extra ordinary situation that a republican community should have agreed to territorial or political consequences arising out of such a marriage of one of its daughters with an independent ruler"[2] does not seem convincing as we have such instances in the case of Cheṭaka, the Lichchhavi rājā and also others.

(iii) The argument that it was Samudragupta who first came into contact with the Śaka-Kushāṇas, and not Chandragupta I, becomes irrelevant, if we take the early home of the Guptas to be at Ayodhyā whence Chandragupta I came to reside in Pāṭaliputra of which we get an indication in the oft-quoted Purāṇic verse : "अनुगंगाप्रयागं च साकेतं मगधांस्तथा...." Śakas during this time were ruling over Eastern Punjab and Western U. P. and the Nāga family was in possession of the regions round about Padmavati, Gwalior, Alwar, Bharatapur and Mathura. By this time they were completely Indianised and had adopted the language and culture of this country. We have a positive proof of it in the Nāsik inscription of Nahapāna and Ushavadatta, who is said to have performed Brāhmaṇic rites and granted villages to the Brāhmaṇas.[3] Moreover, Ayodhyā was the capital of Uttara-Kosala—a very important territory which must have commanded respect and influence also among the neighbouring Śaka territories. Besides, the fact that Mathurā was ruled over by the Śaka rulers, Hagāna and Hagāmasa as far back as the first century A. D.[4] clearly suggests that some sort of contact between the early Guptas and the later Śaka-Kushāṇas can not be ruled out. The Indianised foreign devotees of

1. V. S. Pathak, *JNSI*, Vol. XIX, p. 141.

2. *JNSI*, Vol. XIX, p. 147.

3. Cf. the following lines "पुत्रेण उषवदातेन त्रि-गोशत-सहस्रदेन-नद्या बार्णासायां सुवर्ण-दान-तीर्थकरेण देवताभ्यः ब्राह्मणेभ्यश्च षोडश ग्रामदेन...." (*Select Inscriptions*, vol. I, p. 16?)

4. Cf. the Mathurā Lion-capital inscriptions of the time of Rañjuvula and Śoḍāsba of c. 1-15 A. D. & 10-25 A. D. respectively (vide *Select Inscriptions*, vol. I.)

the Brāhmaṇical religion might have frequented Ayodhyā or Sāketa which was a very important centre of Hindu pilgrimage even in those remote times. This early contact may well have influenced the Gupta numismatic art.

(iv) From the above survey, we naturally come down to the consideration of the question of fabric raised by Allan and followed by others. It is argued that the Chandragupta coins are removed from this proto-type, i. e., the Standard coins, claimed to be the earliest in the Gupta numismatic series, not only in design and fabric but also in the plastic conception of the figures represented. But on close examination of these two types we find that there is no actual difference in weight (121, 118, 119 etc. grains of the Roman standard), dress, standard, symbols and cornucopiae. The only difference that is perceptible is that the lion on the Chandragupta coins is replaced by the throne on the Standard type. A few changes may thus be found here and there but actually we have no fundamental differences between the two types. The plastic conception depends more or less on the skill and aptitude of the artist, and it is not necessary that an artist should always produce the same type of brilliant pieces of art.

(v) Coming to the question of the commemorative medals, we find that such an issue, as a rule, bears the name of its issuer or commemorator and also that of the monarch commemorated. For instance, we have four commemorative silver medallions bearing names of Diodotos Seteros, Antimachus Nikator, Euthydemus and Alexander issued by Agathocleia whose name also appears on the reverse while those of the commemorated we have on the obverse. But here in this case we have none. We are, however, told that Samudragupta does not always give his personal name on his coin, as in the case of Aśvamedha types we have only his *biruda*. But, he is said to have left "sufficient indications with regard to identity of the issuer."[1] What these "sufficient indications" are, we simply fail to understand. As a matter of fact, we have neither his name, nor his *biruda*, nor the so-called "sufficient indications" to accept these coins as Samudragupta's commemorative medals. Even if we take them to be commemorative medals, they must be of Chandragupta I himself, and not of Samudragupta in any case.

(vi) And, lastly we come to the question of joint issues which, according to some scholars, is "an untenable assumption" based on a theory of partnership in administration

1. *JNSI*, Vol. XIX, p. 140.

between Chandragupta I and Kumāradevī.[1] But we fail to understand why this, joint-rule theory be denounced as an untenable assumption when we have several such instances in history. It might have been a pre-condition to the amalgamation of the two territories—a condition not so exacting as not to be acceptable to Chandragupta I who had acquired his new fortunes with the unstinted help and support of the Lichchhavis. Moreover, it is not at all strange that he had no other type to his credit although he was supposed to have ruled for many years. It is rightly argued that he had a short reign after he became a *mahārājādhirāja* and hence he did not get sufficient time to issue another type. Indian history furnishes us with many instances of great Hindu monarchs who never cared to issue coins at all, much less one type. Chālukya Pulakeśin II, Rāshṭrakūṭa Govinda III, Paramāra Bhoja and the Karṇāṭa rulers of Mithilā[2] are glaring instances of this carelessness regarding the issuing of any type of coinage. In view of this, the fact that he did not issue any other type, need not disturb us. A king might be content with only one type whereas kings like Samudragupta issued several types to show off their brilliance. It all depends on the mental aptitude of a monarch, and nothing more.

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1. Ibid., p. 146.
2. See the writer's book, *History of Mithilā*, Chap. V.

FIVE RARE GUPTA GOLD COINS FROM THE BAYANA HOARD

AJIT GHOSE

[Pl. IX]

The Bayana Hoard of Gupta gold coins was the richest numismatic find ever made in India, not only for its intrinsic value but much more so for the wealth of new material and the rich accession it made to our knowledge of the Gupta coinage. The 1821 pieces actually recovered from the hoard include many remarkable new types and varieties. Among those of the utmost importance are the following coins, which are also outstanding by reason of their high artistic excellence: (1) Chakravikrama of Chandragupta II, (2) the Apratigha, (3) the Elephant-rider, (4) the Elephant rider-Lion slayer, (5) the Rhinoceros-slayer, (6) the Lyrist, (7) the Aśwamedha, (8) the Chhatra and (9) the King and Queen, coins Nos. 2 to 9 all being issues of Kumāragupta I, and (10) the Chhatra type of Skandagupta. Among the remarkable coins we have just enumerated, before the discovery of the Bayana Hoard numismatists were aware of only two specimens of the elephant-rider, two of the Aśwamedha and only one specimen of the Apratigha of Kumaragupta I, the last type then known by the wrong name of Pratāpa; all the other types are quite new. It has been conjectured that there were about 285 more coins in the hoard and that these, according to Altekar, to whom we and posterity will always remain indebted for his great work on the Bayana Hoard, "were distributed among the villagers or transformed into ornaments" and we have the interesting information that a sum of Rs. 12,680 was recovered from the villagers by the State authorities of Bharatpur as "the price of 282 coins melted down by them at the rate of Rs. 45 a coin". It is of course not unlikely that some coins were melted down for making ornaments, but it is even more likely that a very large number out of the 282 or 285 were sold to coin dealers of Uttar Pradesh, who are also bullion merchants and who have numerous agents trying to spot and secure old coins for them from the towns and villages of Uttar Pradesh and the surrounding country. Further, the surplus coins were sold by the State authorities after the wants of the museums had been satisfied. Information regarding coins of rare types of the Bayana Hoard which may have

come into the possession of collectors would be of considerable numismatic value. Since the publication of Altekar's *Catalogue of the Gupta Gold Coins in the Bayana Hoard*, only two[1] coins of types which have been found for the first time in the Bayana Hoard only have been published, and both these are of one type, the Rhinoceros-slayer. H. P. Poddar of Calcutta has succeeded in collecting from time to time five rare coins of the Bayana Hoard of five different and very rare types, which will be found to be of great interest and are here published with enlarged photographs of the coins, so that details can be examined more carefully than is possible from the photographs in Altekar's book, excellent as they are, and that might help in the reconstruction of the legends which are uncertain.

1. Lyrist Type **(Pl. IX. 1)**

Metal A'; Size .8″; Wt. 119.5 grs.

***Obverse*:** King seated, nimbate, cross-legged to 1., wearing waistcloth, ear-rings, necklace and armlets, on high-backed but not straight couch, playing the Vinā, which lies on his knees, with r. hand, while 1. hand held extended with palm open in a pose natural in playing the Vinā.

Legend beginning at right and clear : *Mahārājādhirāja Śrī Kumāragupta.*

***Reverse*:** Within dotted border, queen seated on a couch with straight back, the four legs of which are distinctly visible, wearing cloth closely draped from waist to ankle, wearing large ear-rings, necklace and bangle, holding in r. hand extended and bent a flower, while 1. hand rests on seat.

Legend on 1. very distinct : *Kumāragupta.*

The Lyrist coin of Kumāragupta I is obviously modelled on the Lyrist coin of Samudragupta but it cannot claim to be equally beautiful. Of the Lyrist type of Kumāragupta only two coins have been recorded by Altekar, one being now in the Palace Cabinet, Bharatpur, and the other in the National Museum, New Delhi. So Mr. Poddar's is the third known coin of this type

1. Nagar, M. M., Rhinoceros-slayer type coin of Kumāragupta I, *JNSI*, Vol. XI, pp. 7–8.

Chinmulgund, P. J., 'Another Rhinoceros-slayer type coin of Kumāragupta I', *JNSI*, Vol. XVII, pp. 104–106.

2. Apratigha Type **(Pl. IX. 2)**

Metal AV ; Size ·7″ ; Wt. 122 grs.

Obverse: A central figure of a male with top knot and of short stature, standing facing front, with folded hands, wearing pleated *dhoti* with the end wrapped round in front, whose identity is clearly indicated by the legend *Kumāra* written vertically on r. of figure but to be read horizontally from top to bottom, and *Gupta* also written vertically but on l. of figure and to be read horizontally from bottom to top; a female taller figure to r., standing facing central figure, hair tied in a top knot, r. hand bent and palm held as if blessing, wearing bodice and *sārī* and a male figure on l. also facing Kumāragupta, and holding Garuḍa standard in extended r. hand and shield in l. hand.

Legend: Circular legend not yet satisfactorily deciphered.

Reverse: Within dotted border, of which only traces visible, goddess, nimbate, seated on full-blown double lotus with two unopened buds on l., having what looks like a snake-hood behind her head, or may be a tiara, and ear ornaments, r. hand bent and holding indefinite round object, l. hand resting on waist. Symbol on l., Crescent on top r. Legend: Very distinct : *Apratigha.*

The Apratigha is the most intriguing of all Gupta coins as its significance has always presented a baffling problem, which yet awaits a solution. The type was long known from the then thought to be a unique specimen in the British Museum,[1] to which it was presented by Rivett-Carnac, who had purchased it at Mathura. Smith originally called it the "Two Queens" type. Allan had described it in the British Museum Catalogue[2] as the 'Pratāpa' type, following a misreading of the reverse legend by Smith. Coins Nos. 9, 10 and 11 of Altekar's Catalogue as well as the present coin show most of the circular legend on the obverse but in each case the upper portions of the letters have been cut, so that

1. Smith, V. A., Gold Coins of the Gupta Dynasty, *JASB* 1884. p. 206.
Ibid., The Coinage of the Early or Imperial Gupta Dynasty of Northern India, *JRAS*, p. 109.
2. Allan, J., *BMC-Coins of the Gupta Dynasty &c.*, p. 87.

it has not been possible so far to reconstruct the legend and to explain the scene depicted on the coin with its help, though efforts have been made by Mirashi,[1] Altekar,[2] Sivaramamurti[3] and others, and of the explanations offered some seem plausible, some seemingly far-fetched and others merely confusing; as an example of the last: the name on either side of the central figure has been read as Mihirakula,[4] though he who runs can read it as unmistakably Kumāragupta, and so far back as 1881 Smith had read 'Kumāra'. We suggest that the scene on the obverse represents the young Kumāragupta before his accession and hence he is represented as shorter than the other two figures and also named simply as Kumāragupta without any title of sovereignty, being sent on a compaign of conquest by his father, who presents him with the Garuḍa standard and shield, while his mother admonishes and blesses him; while the reverse indicates that under the protection of Durgā—for the goddess is more likely to be Durgā than Lakshmi as the crescent shows—he had shown himself as 'Apratigha' or invincible. If it be asked why Kumāragupta should have issued such a coin long after he had become king, it may be said that it was issued to testify to his valour as the viceregent of his great father and thus to justify his kingship; it was a commemorative issue.

Of the eight coins of this type which Altekar has recorded as having been found in the Bayana Hoard, one is in the Palace Cabinet, Bharatpur (pl. XXX, 11), one in the Bharat Kala Bhavan, (pl. XXXI, 11), and three in the National Museum, New Delhi (pl. XXXI, 6, 7 and 8). We have no information regarding the present whereabouts of the remaining three coins of the hoard of this type. As no other coin of this type has since come to light, Mr. Poddar's coin is the tenth known specimen.

3. Rhinoceros-Slayer Type (Pl. IX. 3)

Metal AV; Size .75″; Wt. 124.5 grs.

Obverse: King bare-headed with flowing hair, wearing waistcloth and jewellery, riding fully caparisoned horse, holding in r. hand sword ready to strike at one-horned rhinoceros on r., which has been brought to bay and has turned his head round.

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1. *JNSI*, Vol. XII, pp. 68-71.
2. *JNSI*, Vol. XI, p. 64; also *Catalogue of the Gupta Gold Coins in the Bayana Hoard*, pp. cx-cxii.
3. *JNSI*, Vol. XVIII, pp. 56-63.
4. *JNSI*, Vol. XII, pp. 72-73.

Legend, Circular: *-tā Khadgatrātā Kumaragupta jayatyaniśam.*

Reverse: Within dotted border goddess Ganga, wearing transparent drapery and jewellery, standing facing l. on Makara holding in its elephant-headed snout lotus with long stalk, r. hand of goddess extended with thumb and fore-finger as if dropping something, l. hand hanging down, at r. young girl attendant holding Chhatra, the wooden pole of which has been turned on a lathe,

Symbol on r.

Legend: On l., *Śrī Mahendrakhadga.*

Sohoni[1] has elucidated the part played by the rhinoceros in relation to Śrāddha ceremonies and it may well be that this coin was struck to commemorate the Śrāddha of Chandragupta II, in connection with which ceremony Kumāragupta had hunted a rhinoceros. It may therefore be regarded as a commemorative issue.

Altekar has recorded four coins of the Rhinoceros-slayer type of Kumāragupta as having been found in the Bayana Hoard. Of these, one coin, being the coin illustrated in Pl. XXX, 5 is in the Palace Cabinet at Bharatpur and one in the National Museum, New Delhi, being the coin illustrated in Pl. XXX, 6. We have no indication as to the whereabouts of the remaining two coins recorded by Altekar. As we have already stated two specimens of the Rhinoceros-slayer type have been published since Altekar's Catalogue, one being in the Lucknow Museum and the other in Mr. Chinmulgund's cabinet, so the present coin is the seventh known specimen of this type.

4. Elephant-Rider Type: (Pl. IX. 4)

Metal AV.; Size .8"; Wt. 125.7 grs.

Obverse: King, bare-headed with flowing, curly hair, wearing waistcloth and jewellery, holding *aṅkuśa* in r. and uncertain object in l. hand, riding on a fully caparisoned war elephant marching to l., attendant with Chhatra seated at rear. Legend: Uncertain, but probably as read by Altekar: *Kshatāripu Kumaragupta jayati ripun.*

1. *JNSI*, Vol. XVIII, pp. 178-186.

Reverse: Within dotted border Lakshmī, nimbate, standing on lotus, facing front, wearing transparent drapery and jewellery-tiara, ear-rings, necklace, armlets and bracelets, and with an *orna*, the ends of which fall on either side of her, r. hand bent and holding lotus plant with buds and flowers, l. hand on waist holding full-blown lotus, conch lying near r. foot.

Legend: *Śri Mahendragaja.*

Only three coins of the Elephant-rider type are recorded in the Catalogue, of which the Palace Cabinet, Bharatpur, contains one, No. 1808, Pl. XXXI, 2, the National Museum one, also stated to be No. 1808, Pl. XXXI, 2 (?), and the Bharat Kala Bhavan one, Pl. XXXI, 3. Two Elephant-rider coins had been known before the discovery of the Bayana Hoard, one of which is in the Indian Museum,[1] while the other had been described by Hirananda Sastri in the Numismatic Supplement. The present coin is the sixth known specimen of this rare type.

Sohoni has pointed out[2] that the coin represents the triumphant ride on an elephant of the king after his coronation; it is thus a commemorative issue.

5. Elephant Rider—Lion Trampler Type (Pl. IX. 5 & 5A).

Metal AV; Size .75"; Wt. 124.5 grs.

Obverse: King bare-headed, wearing coat and lower garment, facing with r. hand uplifted as if holding a weapon, riding on an elephant, which in this specimen does not appear to be caparisoned, facing r., and with uplifted fore-leg trampling on a lion, which has fallen head downwards; attendant behind king, probably holding a Chhatra.

Legend: Uncertain and incomplete, but may be the same as on the Elephant-rider type as suggested by Altekar.

Reverse: Goddess or queen, hair on back of head tied in a bun, wearing transparent drapery tied at the waist with a girdle cloth with the two

1. *I. M. Cat*, I, Pl. XVI, 7.
BMC, Catalogue of the Coins of the Gupta Dynasty, Pl. XV, 16.
2. *JNSI*, Vol. XIX, pp. 191-193.

ends falling on either side, and jewellery and though she is facing l., feeding peacock with outspread tail on r., her body is turned partly to the r., and she apparently stands on a lotus, l. hand resting on waist and holding lotus stalk.

Legend : *Sinhanihanta Mahendragaja.*

The Elephant rider-Lion trampler coin of Kumāragupta I combines the motifs of the Lion trampler coin of Chandragupta II, which Kumāragupta had himself adopted as a coin type and of his own creation of the Elephant rider, with the modification that the elephant on this coin faces right. The two coins together make a noble pair. There were only four coins of this type in the Bayana Hoard as recorded in the Catalogue, of which one is in the Palace Cabinet, Bharatpur, Pl. XXX, I, one in the Bharat Kala Bhavan, Pl. XXX, 3, and one in the National Museum, New Delhi, Pl. XXX, 2. The present coin may be No. 4 as the peacock is beautifully engraved and the reverse legend truncated, exactly as described by Altekar.

HITHERTO UNKNOWN REPOUSSE COINS OF KRAMĀDITYA

BALCHANDRA JAIN

[Pl. IX]

While publishing the Chānda district hoard of the coins of Mahendrāditya and Prasannamātra in this journal,[1] I thought that both these kings belonged to a local dynasty of South Kośala which extended its hold over a wider area than Chhattīsagadha and included the territory extending upto Chānda district in the west and Cuttack in the east.[2] But a recent find of the coins with the names of Mahendrāditya and Kramāditya from the village Pitaiband in the Raipur district of Madhya Pradesh has now thrown a new light upon the complicated and controversial point of the history of the coinage of king Mahendraditya. In this find, the coins of Mahendrāditya are found associated with those having the name of one Kramāditya. This may lead one to think that these are the issues of the Gupta emperors, Kumāragupta I and his son, Skandagupta respectively.

The hoard which is now depcsited in the Mahant Ghasidas Memorial museum, Raipur, cointains forty-six coins of Mahendrāditya and three coins of Kramāditya. They are in an excellent state of preservation except the three coins of Mahendrāditya which are cut into pieces by the villagers. All the coins are round in shape and manufactured from thin sheets of base gold. They are struck repoussé having blank reverses. The coins measure from 1.7 to 1.9 cms. in diameter and weigh from 1.250 to 1.380 gms. each. They are described below :

Mahendrāditya

Variety 'A' (six coins) **(Pl. IX. 10)**

Inside the circle of dots along the edge, Garuḍa standing on a horizontal line with wings spread out ; to his proper right are the crescent moon and a *chakra* encircled by dots ; and to his proper left are the so-called sun symbol and a *Śankha*, opening to the right. Below the line is the legend *Śrī-Mahendrāditya* in the box-headed (closed box) characters of the fifth century A. D. Below the letter *ma* of the legend

1. Vol. XVI, Part II, pp 215-18, Plate IV, 1-12.
2. Coins of Mahendrāditya and Prasannamātra are known from Orissa. See *OHRJ*, I, p. 137 and *ASI.AR*, 1926-27, p. 230.

stands a cluster of seven dots and there is the letter *ru* below the letter *he* of the legend.

Variety 'B' (nineteen coins) **(Pl. IX. 11)**

As above, but a 'single dot symbol' below the letter *ma* of the legend in place of the cluster of dots; and solitary letter *da* in place of *ru* below the letter *he* of the legend.

Variety 'C' **(Pl. IX. 12-13)**

As above, but a *kalaśa* below the letter *ma* of the legend followed by a single letter *da* and a dot.

Variety 'D' **(Pl. IX. 14-17)**

As above, but no symbol below the letters of the legend. The solitary letter *bha* looks like *ta* or *ga* in some cases.

Variety 'E'—(one coin). **(Pl. IX. 18)**

As before, but no symbol below the legend. Solitary letter *ru*.

Kramāditya

(Pl. IX. 7-9)

All the three coins of this king are smaller in size measuring 1.7 cms. in diameter; two of them weigh 1.300 gms. each while the third is 1.330 gms. in weight.

The upper half of the coins shows Garuḍa as above. Below is the legend *Śrī-Kramāditya* in the box-headed characters of the 5th century A. D.; below the letter *ma* of the legend is a solitary letter *ru*. But the symbol below the name is conspicuously absent.

It may be noted that the legend on the coins of Kramādityа, unlike that on those of Mahendrāditya[1] (and Prasannamātra[2] also), ends with the genitive suffix *sya*, suggesting thereby that the issues of the latter are earlier than those of the former. Other points to be noted are:

1. Solitary letters are found on the coins of Mahendrāditya but they are not seen on the issues of Prasannamātra and the Naḷa kings.[3]

1. The legend on the coins of Varāha, earliest of the Nala coins, contain the name of the king in nominative unlike that on those of Bhavadatta and Arthapati containing the names of respective kings in the genitive case See *JNSI*, Vol. I, pp. 29 ff.
2. *Proc. of 5th Oriental Conference*, Lahore; *IHQ*, IX and XV; *The Vakataka-Gupta Age*, p. 87, f. n. 3; *JNSI*, Vol XII, p. 8, plate I. Nos. 4-6; *ASI.AR*. 1926-27, p. 230; *JNSI*, Vol. XVI, Part II, pp. 215-18, plate IV, 1-12.
3. *JNSI*, Vol. I, p. 29 ff., plate V-C.

2. No symbols are found on the coins of Kramāditya and those of the Naḷa kings. There is a variety of the Mahendrāditya's coins that does not have any symbol below the legend.
3. Symbols on the coins of Prasannamātra are of two kinds, (i) a cluster of dots and (ii) a *kalaśa*, ; but the coins of Mahendrāditya have a third symbol made of a single dot, in addition to the two.

It is thus quite clear that Mahendrāditya was not far from Kramāditya and Prasannamātra. King Prasannamātra as a ruler of South Kosala is well known from the records found in this region ; but for the identification of Kramāditya and Mahendrāditya, we have to look elsewhere.

We know that Mahendrāditya was a *biruda* of the Gupta emperor Kumāragupta I[1] and that his son Skandagupta had the title of Kramāditya.[2] Kumāragupta Mahendrāditya is known for having issued a number of new types of gold coins and also introduced silver currency for the home province of the empire. We further know that he had issued silver-plated coins both in the home province as well as in western India. It does not, therefore, seem to be impossible that these thin coins of base gold also were issued by him for circulation in South Kosala and Orissa. The type was borrowed from the coins of Prasannamātra who most likely was a contemporary of Kumāragupta I and had issued two varieties of his coins, having a symbol below the legend but no solitary letters. The cluster of dots and the *kalaśa* symbols on the coins of Mahendrāditya are very much similar to those occurring on the coins of Prasannamātra. A third symbol appears to have been introduced by Mahendrāditya in addition to the above two. Further, the coins of Prasannamātra have simply a symbol below the legend, while the coins of Mahendrāditya have an additional letter. The symbol and letter interchange the place on different coins of Mahendrāditya[3] while the place of the symbols on the coins of Prasannamātra is always the same.

1. A pillar inscription of the time of Skandagupta, discovered at Supia, about 10 miles east of Rewa, is peculiar in naming Kumāragupta I by his title of Mahendrāditya only. This inscription traces the genealogy of the Gupta dynasty from Ghaṭotkacha as is nowhere done in any other Gupta record.
2. Ghaṭotkachagupta, a brother (?) of Skandagupta had the same *biruda* of Kramāditya. His coin in the St. Petersberg Museum has the legend *Ghaṭo* under the king's left arm and the reverse legend is *Kramāditya*. The reverse legend on the coins of Kumāragupta II, great grandson of Kumāragupta I is also *Kramāditya*.
3. On one coin of Mahendrāditya, discovered in the Chanda district, the letter *śa* comes first and is followed by the cluster of dots.

The latest variety of the coins of Mahendrāditya was that on which we have the solitary letters without any symbols. This type was continued by Kramāditya on whose coins we have a single letter *ru* and no symbol. The coins of Kramāditya were followed by those of the Naḷa kings. There the practice of putting the solitary letters has been given up and the device changed.

But there are other problems which require further evidences. There is hardly anything to place Guptas in Chhattisagaḍha, except the Allahabad Pillar Inscription which states that the South Kosala region was brought within the sphere of the imperial influence during the time of Samudragupta. That too does not show that the area was included in the kingdom. The use of the Gupta Era in one solitary record found in the Raipur district[1] may not be taken as a sufficient evidence to prove that the province was administered by the Gupta emperors. We can not therefore suggest any thing with certainty for the present. Let us wait till the conclusive evidence comes to settle the question.

The significance of the solitary letters that we have on the coins of Mahendrāditya and Kramāditya is also not known. We have such letters on the gold coins of the later Imperial Guptas but their presence on those coins does not suggest that they were issued by any of their feudatories. It does not seem possible to suggest that these solitary letters are the monograms or initials of any feudatory chief under Mahendrāditya or Kramāditya. The letters may be numerals denoting the regnal years of the issue of the coins as there was a general custom prevailing in the South Kosala (and also in other parts) to date the events in the regnal years of the ruling king.[2] They also might be mint-indications since a coin with a quite different letter has been found from a quite different territory.[3]

1. Ārang Plates of Bhīmasena. *Ep. Ind.*, IX, pp. 342 ff. The history of this dynasty is itself shrouded in mystery.
2. Almost all the copper plate inscriptions found in this region are dated in the regnal years of the ruling kings.
3. *JNSI*, Vol. XVI, Part II, p. 218.

SOME INTERESTING SUB-VARIETIES OF THE GUPTA COINS

S. M. SHUKLA

[Pl. X]

Recently, while I was looking into my coin-cabinet with the help of A. S. Altekar's *Coinage of the Gupta Empire*, I noticed that I possess a few Gupta coins, which have some interesting peculiarities and deserve the attention of the numismatists. I, therefore, take this opportunity to publish them here.

Standard Type Coins of Samudragupta

(i) Round; .85″; Weight 7.52 grammes (116.06 grains)

(Pl. X. 1)

Obverse : King standing to left, nimbate, wearing ear-rings, armlets, close-fitting cap, tailed coat and trousers; holding in his left hand standard with round top and pointed end and bound with fillet; offering incense with his right hand on an altar. A Garuḍa standard in the left field. Beneath the left arm, *Samudra* written vertically. Circular legend *Samara-śata* between VII and X and *vitata-vija* . . between II and IV.

Reverse : Goddess seated on throne; holding cornucopiae in her left hand and *pāśa* in the right; Symbol No. 6 (of the *Coinage*) on left and the legend *Parākramaḥ* on the right.

The coin is very much similar to the coin of Class I, Variety E of the *Coinage*, where the circular legend, like the present coin, begins from the left at VII and goes only upto X and again begins at about II and goes upto V.

The coins of the Varieties A to D begin their legend from the right at about I and continue without any break upto XI and thus accommodate the full legend *Samara-śata-vitata-vijayo-jita-ripurajito-divaṁ-jayati*, containing 23 letters. But on the present coin we find that the legend starting from the left at VII ends with five letters a little above IX and again begins from II and ends at IV with other five letters. The legend on the coin published in the *Coinage* also begins at about II and

ends at IV with other six letters. Thus in both the cases sufficient space has been left between X and II and again between IV and VII, where other letters could have been well accommodated. That the space between X and II was left deliberately is clear from the fact that the legend had its continuation from II. The legend may well have continued between IV and VII but it is difficult to postulate that the space available there would accommodate the remaining 13 letters in the case of the present coin and 10 letters in the case of the coin published in the *Coinage*. This space is only as much as has been occupied by five or six letters engraved on the coins.

A careful observation shows that no attempt was made to continue the legend after the letters *jita* on the coins published in the *Coinage* and possibly one or two letters only were engraved after the letter *vija* on the present coin.

Thus these coins end with only half the legend. A coin with a similarly incomplete legend was earlier noticed by P. L. Gupta ;[1] but on that coin the legend began at I and continued uninterrupted upto little above X and no space was left for the remaining letters. Altekar, in an editorial note on the said coin, had cited such instances from other types where portions of the legends were omitted. He suggested that the omissions were due to lack of judgement on the part of the engraver about the space required for the legend.[2] But here no such argument seems to apply. *Prima facie*, it appears that on these coins shorter legend *Samara-śata-vitata-vijayī* is deliberate and not that the latter portion of the full legend was missed by the engraver. Since I do not feel myself quite competent to suggest that the legend in itself is complete, I invite the attention of the scholars to it.

(ii) Oval; .97″ x .85″; Weight 7.6774 grammes (118.5 grains).

(Pl. X. 2)

Obverse: Same as (i); but legend beginning from I *Samara-śata-vita...* (on left) ***ripurajito-divaṁ-jayati.***

Reverse: Same as (i); Symbol new (not described in the *Coinage*).

The chief interest here lies in the fact that the coin has the legend *Samara-śata-vita* on the right in a straight line. As such, it belongs to Type I Variety F; but here the

1. ***JNSI***, Vol. VIII, p. 44-45
2. Ibid., p. 46-47

legend begins from I i. e. from the right while the coin published in the *Coinage* has the legend beginning from the left. Thus this constitutes a new variety, which we may call Variety A(i).

(iii) Round; .85″; Weight 7.53 grammes (116.22 grains). **(Pl. X. 3)**

Obverse: Same as (i); but a dagger is hanging from the waist-belt of the king on the right. Legend (I) *Samara-śata-vitata-vi...*

Reverse: Same as (i); Symbol No. 20 (of the *Coinage*).

The coin belongs to Class I Variety D (of the *Coinage*). Only one coin of this type is known so far and it is in the Ajita Ghose Collection. This is a second specimen and is better preserved.

Archer Type Coins of Chandragupta II

(iv) Round; .75″; Weight 7.7926 grammes (120.26 grains). **(Pl. X. 4)**

Obverse: King standing to left, nimbate, wearing ear-rings, necklace, armlets, pearl-bordered cap having a pearl string hanging behind, tailed coat, *kachchha* and long boots. A dagger is tied with belt on the waist to left; holding a bow by its top in his left hand and an arrow in the right. Garuḍa standard in the left field. Beneath the left arm *Chandra*, written vertically. Circular legend (I) *Deva Śrī Mahārājādhi...... Chandraguptaḥ* (truncated).

Reverse: Goddess seated facing on lotus, nimbate; holding a *pāśa* in the right hand and a lotus with long stalk in the left. A new symbol to left; *Śrī-Vikramaḥ* to right.

This coin belongs to Class II; but no coin with king having dagger in his belt is known so far. As such this is a quite new variety, which may be called Variety Q.

(v) Oval; .75″ x .85″; Weight 8.0848 grammes (124.78 grains). **(Pl. X. 5)**

Obverse: King standing to left, nimbate, wearing ear-rings, necklace, armlets, tailed coat and *dhotī*, whip hanging to his left; holding bow by its top in his left hand and an arrow in the right. Garuḍa standard in the left field.

Chandra under the arm. Circular legend off the flan.

Reverse: Goddess seated facing on lotus, nimbate; holding a lotus with long stalk in the left hand, hand placed on the thigh, and scattering coins by the right hand. A new symbol on the left; *Śrī Vikrama* on the right.

The coin belongs to Class II and, according to its obverse, to the Variety E. But the present coin has a quite different reverse. Here we have the Goddess scattering coins. Goddess scattering coins is well known on the reverse of the coins of Class I, but as Altekar has markedly pointed out, it was not known in Class II.[1] The present coin, however, shows that this motif was also used on the coins of Class II. If thus constitutes a new variety, and may be called Variety E(i).

(vi) Oval; .75″ × .8″; Weight 8.0362 grammes (124.01 grains).

(Pl. X 6)

***Obverse*:** King standing to left, nimbate, as on coin (v). Circular legend *Devaśrī-Mahārāja*...

Reverse*:** Goddess seated facing on lotus, nimbate; holding lotus with long stalk in the left hand, hand placed on thigh, and holding *muṇḍa-mālā* (?) in the right hand. Symbol No. 69 (of the *Coinage*) on the left and ***Śrī-Vikrama on the right.

The coin belongs to Class II Variety E. At the first sight it appears that the Goddess is scattering coins with her right hand, as on the above coin, but the posture of her palm suggests that she is holding something hanging down. As such she is probably holding a *muṇḍamālā*, which is seen on some coins of the lion-slayer type of Kumāragupta. If it is so, then this would be quite a new variety, otherwise, this may be another specimen of the variety described above.

Bull Type Silver Coins of Skandagupta

(vii) Shape irregular; .5″ × .55″; Weight 1.573 grammes (24.28 grains).

(Pl. X. 7)

(viii) Shape irregular; .5″; Weight 1.581 grammes (24.41 grains).

(Pl. X. 8)

1. *The Coinage of the Gupta Empire*, p. 96.

***Obverse*:** Bust of the king to right.

***Reverse*:** Bull to left in centre; legend around. Legend, (on both coins) *Para . Skandagupta Kramāditya.*

The silver coins of Skandagupta having bull on the reverse are well known and are described in the *Coinage* as the coins of Class II; but on all the coins published so far the bull is known to face right, while on these coins it is facing left. As such these coins constitute a new variety. The coins of this type may now be distinguished into two varieties (i) bull facing right and (ii) bull facing left.

A KALACHURI COIN FROM ELLORA AND THE DATE OF THE RĀMEŚVARA CAVE

R. SEN GUPTA

[Pl. XI]

Of the coins so far recovered from Ellora, the most interesting is the silver coin of the Kalachuri king Kṛishṇarāja (c. 550-575 A.D), recently found in front of the Rāmeśvara cave (No. XXI) shrine, one of the earliest Brahmaṇical excavations. The coin may be described as below :

Weight : 33 grains.

Metal : Silver ; Irregular circular ; Size : ·5"

(Pl. XI. 1.) (enlarged)

But for a patch of copper encrustation on the obverse, which has been considerably cleaned by chemical treatment, it is in a good state of preservation.[1]

Obverse : Head of the king to right and dots along the edge. The king wears a collar.

Reverse : Inside a circle of dots along the periphery the legend beginning at XII, *Parama Māheśvara [mātāpitṛipādānu]dhyāta Śrī Kṛishṇarāja* with a couchant bull to right in the centre.

The coin type was known as *Kṛishṇarāja-rūpaka* as shown by the Anjaneri Plates[2] of Pṛithivīchandra Bhogaśakti of the Hariśchandra family ; and it has been greatly influenced by the 'Bull-type' of the silver coins of Skandgupta.[3] Though issued by Kṛishṇarāja in the latter half of the sixth century A. D., it was in circulation for about a hundred and fifty years and has been found at a number of other places like Nasik, Satara, Bombay and Salasette.

Besides Muslim coins, two coins of the Chola king Rājarāja I[4] (985-1014 A. D.) have been reported from Ellora in the past. But the Kalachuri coin is the earliest one so far

1. The writer is thankful to M. S. Mathur for cleaning the coin chemically.
2. *EI*, Vol. XXV, p. 229.
3. A. S. Altekar, *The Coinage of the Gupta Empire*, pp. 252-53. The coins have been illustrated by J. Allan in *BMC, GD*, Pl. XX. Nos. 9-12.
4. M. N. Deshpande - Two copper coins of the Chola king Rājarāja I from Ellora, *JNSI*, Vol. XIX, Pt. II, pp. 193-195.

known to be found at Ellora and the find is quite significant, as it might throw light on the authorship of some of the pre-Rāshṭrakūṭa cave temple site, which have remained still undefined.

The occurrence of the Kalachuri coin at Ellora might be due to one of the two reasons: either, somebody who was following the trade route connecting Nasik and Pratishṭhāna, via Ellora and Pitalkhora (as indicated in Buddhist text *Mahāmāyūri* of the 4th cent. A. D.) offered it in worship while visiting Ellora or the workers working on the Rāmeśvara cave were paid in those coins by the Kalachuri king responsible for the cave temple. Albeit the coin-type was in circulation for about one hundred and fifty years, it is unlikely that any successor king of a different dynasty would be using that coin, rather than his own currency. The presumption that the Rāmeśvara cave might have been a Kalachuri work is supported by the presence of the Lakulīśa figure on the architrave at the entrance to the cave. It may be recalled that the Kalachuris of Māhishmatī were avowed *pāśupatas*. Along with this, another point which naturally comes to one's mind is the Abhona charter of Śaṅkaragaṇa recording the grant of land in the Bhogavardhana *vishaya*, since identified with the modern Bhokardan[1] in the Aurangabad district. Nasik also being included in the Kalachuri dominion, it stands to reason that the intervening territory covering Ellora should be under the Kalachuris and it is not until the Chalukya king Maṅgaliśa subdued Buddharāja, son of Śaṅkaragaṇa, that the territories mentioned above changed hands.

The buildings of the early Kalachuris are not known, much less any temple of theirs with the Lakulīśa figure at the entrance. At Ellora, besides in Cave XXI, Lakulīśa is figured on the architrave of the *sabhāmaṇḍapa* of another unfinished cave temple numbered XVIII.

The only sizable image of Lakulīśa at Ellora is to be found in the Dumar-Leṇa (Cave XXIX) which is modelled after the Cave I at Elephanta,[2] wherein an elaborate panel

1 Recently an ancient site has been discovered at the Bhokardan, by M. N. Deshpande, which flourished during the reign of the Sātavāhanas. Apparently Bhokardan was linked in the trade route connecting Pratishṭhāna and Sanchi where Bhogavardhana is mentioned several times in the inscriptions. (Inscription Nos. 156, 162, 163 etc., *Monuments of Sanchi*, Vol. I pp. 315 ff).

2. V.V. Mirashi attributes Elephanta caves to the Kalachuris (*CII*, Vol. IV. pt. I pp cxlviii. No doubt the images of Lakulīśa, one at the entrance to the main cave and another in the subsidiary excavation to the west, are one of the considerations for the attribution.

of the god is carved right at the entrance. The Dumar-Leṇa being datable to the first half of the eighth century A. D., the Kalachuris cannot be associated with its execution. Should it be inferred then that the Kalachuris at Ellora could only finish the Rāmeśvara cave and when Cave XVIII was in progress, the Chālukyas took over, and hence it was left unfinished? It may be argued that besides the positive evidence of the stray coin, if the sculptural evidence is to be considered then a claim for the Chālukyas over the Rāmeśvara cave also may be put forward; for there are Śaiva panels as of Śiva's *Kalyāṇasundara-mūrti*, the *Saptamātṛikās*, who are said to have nurtured them; Kārttikeya, who gave protection, in Cave No. 1 at Bādāmī. But the *Saptamātṛikās* and Kārttikeya were popular enough in the 6th-7th centuries A. D., as also evidenced from the epigraphical records of the Guptas and the Kadambas, to be sculptured in the Rāmeśvara cave. Furthermore, incredible though it may appear, the *Saptamātṛikās* have not been figured in the Bādāmi caves of the Chālukyas. Bracket figures appear, though in a smaller scale, in the Vākāṭaka excavations too at Ajanta and the *Kalyāṇasundara-mūrti* panel in the Rāmeśvara cave has different arrangements than those found in the Bādāmī panel. To add, although the modelling of some of the sculptures in the Rāmeśvara cave no doubt betrays to some extent the feeling of solidity, the total effect conveyed by the images, unlike the Bādāmī sculptures, is unmistakably that of weightless existence, soft roundness and charming grace, as portrayed in the images of Gaṅgā, the *Saptamātṛikās* etc. Lastly, the Rāmeśvara cave is a purely Śaiva excavation while the Chālukya works at Bādāmī and Aihole are pantheistic and contain both Śaiva and Vaishṇava sculptures. So, had the Rāmeśvara cave been associated with the Chālukyas, it could not have retained its monotheistic character.

The find of the Kalachuri coin gives rise to the foregoing considerations and the evidences, both positive and sculptural, in regard to the authorship of the Rāmeśvara cave, in favour of the Kalachuris, out-weigh those of the Chālukyas.

COINS IN THE KHARATARAGACHCHHAPAṬṬĀVALI*

DASHARATHA SHARMA

The *Kharataragachchhapaṭṭāvali*, compiled by Jinapāla (died V. S. 1311) and the chroniclers of the *gachchha* who followed him up to V. S. 1393 (1336 A.D.)[1], name six kinds of coins, the *pāruttha*, the *dramma*, the *jaithala*, the *dvivallaka-dramma*, the *hema-ṭaṅka*, and the *raupya-ṭaṅka*.

The *pāruttha* is mentioned twice, once as in use at Aṇahillapaṭṭana in Gujarat during the reign of Durlabharāja Chaulukya,[2] and thereafter as a coin used in the kingdom of Naravarman of Mālwā, who granted two *pārutthas* daily from the custom-house at Chitore for worship in a *vidhi-chaitya*.[3] From a reference to the *pārutthas* in the *Purātanaprabandhasaṁgraha*, it is known that a *pāruttha* equalled eight ordinary *drammas*,[4] probably in billon. The *Lekhāpaddhati* proves that it was a silver coin;[5] and if we carefully consider all the references to it, literary as well as epigraphic, it would be obvious that it had a wide area of circulation which included Rajasthan, Mālwā, Gujarat, and northern Mahārāshṭra.[6]

Dramma is mentioned more often than any other coin. The *Kūrchapurīya-āchārya* paid 500 *drammas* to Jinavallabha's mother to have her intelligent child as his disciple.[7] Sādhāraṇa, perhaps the richest of the merchants of Chitore, fixed 1,00,000 *drammas* as the limit of the property that he would amass;[8] and Jinapati Sūri's uncle is known to have actually amassed this huge sum.[9] From the various other references to *dramma* in the *Paṭṭāvali*,[10] we can easily infer that it was in common use in Rajasthan and Gujarat up to V. S. 1356, i.e., the beginning of the reign of Alāuddīn Khalji;

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* I am indebted to Late Prof. A. S. Altekar for a number of kind suggestions.

1. Now published as *Kharataragachchha-bṛihadgurvāvali* in the *Singhī-Jaina-Granthamālā*. For a fairly detailed notice of the work, see my paper on it in *IHQ*, XXVI, pp 223 ff.
2. p. 2 of the above edition.
3. Ibid., p. 13.
4. See *IHQ*, XXVI, p 224, f.n. 4.
5. pp. 34 and 43.
6. Epigraphic references include Aparāditya II's Lonāḍā (near Kalyān in Bombay State) inscription of the Saka year 1106 and Someśvara's Chhanje (Konkan) inscription of Saka year 1182 (See R. C. Agrawala's paper on 'Dramma in Ancient Indian Epigraphs' in *JNSI*, Vol. XVII, part 2, p. 75).
7. *Paṭṭāvali*, p. 8.
8. Ibid., p. 10.
9. Ibid., p. 33.
10. See pp. 52, 53, 55, 57, 59, and 61.

and if 8 *drammas* could be had for 1 *pāruttha*, the ordinary *dramma* should have been, as opined above, a billon coin, not very different in value from the Muslim *dirham* to which we shall refer presently.

The *jaithala*, the *dvivallaka-dramma*, the *hema-ṭaṅka* and the *raupya-ṭaṅka* were Muslim coins introduced into. Rajasthan and Gujarat by the Khaljīs[1] after their conquest of these territories. The income of the Jaina temples of Nāgor and Hastināpura in the Vikrama years 1375 and 1376 respectively is expressed not in *drammas* but in *jaithals*, or *jitals*,[2] a coin-type probably first introduced in the reign of Iltutmish. Silver and gold *ṭaṅkas* are mentioned in connection with the ceremonies and worship by Jaina *saṅghas* at Śatruñjaya.[3] Pheru tells us that a silver *ṭaṅka* weighed 1 *tolā*;[4] and from Muslim sources we learn that its value at Delhi was 48 *jitals*.[5] A *jaithala* or *jītal* would thus correspond to two *nayā paisas*. The gold *ṭaṅka* used in worship may have been one *tolā* in weight, though gold *ṭaṅkas* of a higher weight also are mentioned by Pheru.

As regards the *dvivallaka-drammas*, V. S. Agrawala thinks that they were called by this name on account of having a mixture of two *vālas* or six *rattīs* of base metal.[6] I accepted this view in my *Early Chauhān Dynasties*[7] But a more careful perusal of the *Dravyaparīkshā* of Pheru has now made me doubtful about the accuracy of this explanation. Taking the *dvivallaka-dramma* to be a Muslim coin,[8] because

1. For these conquests see the present writer's *Early Chauhān Dynasties*, pp. 109-119, 159-170 and the critical summary of the *Kānhaḍadeprabandha* in the *Śodhapatrikā*, III, Part 1.
2. *Paṭṭāvali*, pp. 66, 67.
3. Ibid., p. 74. See also pp 86, 87, and 88.
4. रूप्य-टंका सर्वेपि इक्कतोल्लिया
5. See Nelson Wright's *The Sultans of Delhi, Their Coins and Metrology*, p. 395.
6. *JNSI*, Vol. XII, pp. 202-3. C. D. Dalāl, the editor of the *Lekhāpaddhati* held the same view.
7. p. 303.
8. Since writing the above, I have come across the mention of a *Visalapriya dvivallaka dramma* in a draft of the *Lekhāpaddhati*, dated there in V. 1288. But I am not sure whether the reference has any real value. Vīsaladeva Chaulukya, who may be presumed to have issued the coins, did not come to the throne of Aṇahilla-pāṭaka before V. 1298 or so. The throne was occupied up to V. 1296 at least by Bhīmadeva II. The drafts in the *Paddhati* are mere models, and the date V. 1288 is not unoften put where it should not be, if actual history. The book is written in the mixed Sanskrit of the fifteenth century and its author who knew of the *dvivallaka drammas* and also the *Visalapriyā drammas*, perhaps combined the two into one and put them arbitrarily in a document purporting to have been written in V. 1288 (1231 A. D.). So far I have come across no reference to the actual use of *dvivallakas* before 1323 A. D.

we find it used in Rajasthan, Gujarat and Saurāshṭra only after the conquest of these territories by the Muslims, I scanned the *dramma* series of the reign of Qutbuddīn Mubārak who, according to Pheru, issued 63 types of coins.[1] Of these the seven which belonged to the *dramma* class are described as below in Pheru's table :

Circular Coins, 3 Types, 1 Taṅka[2] Each in Weight

1. *Dugānī*—In one hundred of these (the respective amount of its) two metals was :

Silver	8 *taṅkas*	(i. e. 32 *māshās*)
Copper	92 *taṅkas*	(i. e. 368 *māshās*)

(The coin thus had 8% silver, 92% copper.)

2. *Chaugānī*—In one hundred of these (the respective amount of its) two metals was :

Silver	16 *taṅkas*,	1 *māshā*,	9 *yavas*
Copper	83 *taṅkas*,	2 *māshās*,	7 *yavas*

(The coin thus had 16% silver, 84% copper.)

3. *Chhagānī*—In one hundred of these (the respective amount of its) two metals was :

Silver	24 *taṅkas*,	3 *māshās*,	$1\frac{1}{2}$ *yavas*
Copper	75 *taṅkas*,	0 *māshā*,	$14\frac{1}{2}$ *yavas*

(The coin thus had approximately 25% silver, 75% copper.)

Circular Coins, 4 Types

1. *Aṭhagānī*—In one hundred of these (each one of them obviously of 1 *taṅka* each, the respective amount of its two metals) was :

Silver	33 *taṅkas*, 0 *māshā*, 9 *yavas*, 4 *visuva*
Copper	66 *taṅkas*, 3 *māshās*, 6 *yavas*, 16 *visuvas*

(The coin thus had about $33\frac{1}{3}$% silver and $66\frac{2}{3}$% copper).

2. *Bārahgānī*—One hundred of these weighed 150 *taṅkas*. (Each one of these, obviously weighing $1\frac{1}{2}$

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1. इत्तो भणामि संपइ कुदुबुद्दी रायवंदि छोडस ।
चउरेस वट्ट मुद्दा नाणाविह तुल्ल मुल्लो य ॥१३९॥
वत्तीसं कणयमया रुप्यमया वीस दम्म सत्तविहां ।
चउविह तंवय साहा मुद्दा सव्वेवि तेसट्ठी ॥१४०॥

2. One *taṅka* equalled 4 *māshās*. See, the table of weights below.

ṭaṅkas, had the respective amount of its two metals as follows :)

Silver 1 *māshā*, 15 *yavas*, 16 *visuvas*, 7⅛ *visuvaṁsa*,
Copper 4 *māshās*, 0 *yava*, 3 *visuvas*, 12⅝ *visuvaṁsas*
(The coin thus had about 33⅓% silver and 66⅔% copper.)

3. *Chaubīsagāni*—(One *chaubīsgānī* weighed) 3 *ṭaṅkas* and had respectively the following amount of the two metals :

Silver 3 *māshās*, 15 *yavas*, 12 *visuvas*, 14.2/5 *visuvaṁsas*.

Copper 8 *māshās*, 0 *yavas*, 7 *visuvas*, 5.3/5 *visuvaṁsas*.

(The coin thus had about 33⅓% silver and 66⅔% copper.)

4. *Aḍatālīsagānī*—(One *aḍatālīsagānī* weighed) 6 *ṭaṅkas* and the *dravya* in it was double of that in the *chaubīsagānī*.[1]

In these *gānīs* the proportion of silver goes on increasing up to the *Aṭhagāni*, after which it remains constant, the value of the succeeding coins increasing not with any increase in the proportion of silver but with a general increase in the weight of the coin itself. While each of the *Dugānī*, *Chaugānī*, *Chhagānī* and *Aṭhagānī* pieces weighs one *ṭaṅka*, the next three coin-types weigh respectively 1½ *ṭaṅkas*, 3 *ṭaṅkas* and 6 *ṭaṅkas*.

As none of these seven types of Pheru's *dramma* series corresponds to the hypothetical *dramma* with a total of 6 *rattīs* of base metal, i. e., copper, would it not be better to give *dvivallaka* some other meaning ? In the *Kumārapāla-charita* of Hemachandra as well as the well-known Sanskrit *prabandhas* of Gujarāt, the root *vall* or *val*, found as *val* even in modern Rājasthānī and Gujarātī, means to turn back or return. So may we regard *dvivallaka* as a *dramma* in which we have two turns of the base metal for one of the good one, i. e., in which the proportion of silver and copper is 1 : 2 ? Such a coin we have actually in the *aṭhagānī* of the above series, in which the amount of copper is just the double of silver. And that the *aṭhagānī* was known as *dramma*, a little more particularly than other billon coins, can be surmised from Shams-i-Siraj's account according to which one *ṭankah* of Firūz Shah Tughlaq equalled 6 *hashtagānīs*, i. e. *aṭhagānīs*

1. Table on p. 37 of the *Dravyaparikshā*, for the advance proofs of which I am thankful to Munirāja Jinavijayaji and Agar Chand Nahta.

or 6 *dirhams*.[1] It is possible, no doubt, to think of the *dvivallaka* in which there were 6 *rattīs* of copper to one *māshaka*; but as the *māshaka* used in weighing gold and silver appears to have been of not more than 5 or 6 *rattīs*, this would not be a very good alternative to adopt.

The weight scheme followed by Pheru in his account of these *gāṇīs* can be given as below on the basis of Pherū's *Gaṇitasāra-kaumudi*[2] as well as the figures in the *Dravyaparīkshā* :

20 *visuvaṁsas*	1 *visuva*
20 *visuvas*	1 *yava*
16 *yavas*	1 *māshā*
4 *māshās*	1 *ṭaṅka*
3 *ṭaṅkas*	1 *tolā*

The weight scheme using *rattis* was also known to Pheru; and from the weight of the coins of Mahobā as well as the *Gaṇitasāra-kaumudi* we can state that 1 *māshā* equalled 6 *rattīs*.

We have pointed out above that the value of a *jīthal* was about 2 *nayā paisās*. This view is confirmed by the prices of Mahobaka coins given by Pheru. The *vīravarmu*, probably a coin issued by Vīravarman, had 4 *rattīs* of gold, 4 *rattīs* of silver and 19 *rattīs* of copper and was priced 24 *jīthals*. *Hīravarmu* contained 3¾ *rattīs* of gold, 3¾ of silver and 19½ *rattīs* of copper and was priced 22 *jīthals*. The *Trilokavarmu*, probably issued by Trailokyavarman, had 1 *māshā* of gold, 1 *māshā* of silver, and 2½ *māshās* of copper and was priced 36 *jīthals*. The Chandella ruler, Bhojavarman, also issued coins, but they were of various standards.[3] If we follow Nelson Wright in putting the standard of silver to gold as 10 : 1 and that of copper to silver as 80 : 1, the calculations on the basis of the above coins would show that 1 *jaithal* could purchase about ⅝ *rattīs* of silver. But as this would give 88 *rattīs* or 1.2/9 *tolās* (calculating 6 *rattīs* for a *māshā*) for one *ṭaṅkah* of 48 *jīthals*, which is perhaps a little higher than it should be, we may have to introduce a little correction in the proportions suggested by Wright, and the purchasing price of 1 *jīthal* may have to be put at a little less than 1.5/6 *rattīs*, i. e. at 1½ *rattīs* of Pheru's standard of 6 *rattīs* for a *māshā*.

Some idea of the comparative value of the *dvivallaka drammas*, *drammas* and *jaithals* or *jītals* can be had also from

1. I have mislaid the card containing the reference.
2. See *Viśālabhārata*, 1947, p. 394.
3. *Dravyaparīkshā*, vv. 69-72.

THE SO-CALLED BENGAL COINS OF SULṬĀN SHAMS-AL-DĪN ILTUTMISH

A. KARIM

Edward Thomas and H. N. Wright attribute the origin of the gold and some silver coins of Sulṭān Shams-al-Dīn Iltutmish to Bengal. Incidentally these are the only extant gold coins and the earliest dated silver coins of Iltutmish. Why Iltutmish paid so much attention to Bengal rather than the capital city of Delhī and surrounding areas and issued his earliest medallic records from as far a place as Bengal is not explained by the learned scholars. The question, however, poses a challenge to the validity of their view and an actual examination of the coins reveals that their opinion needs revision.

The coins of Iltutmish attributed to the Bengal origin are described below :

1. Gold coins

Two specimens, one obtained from Bihar hoard, now in Berlin and the other preserved in the American Numismatic Society. Both the coin are of horseman type.

(a) The first coin bears on the obverse within circle Turk horseman to left at the charge, carrying mace. In field to right of horseman the word ضرب and below the horse the word گور. The obverse margin bears the *Kalimah* and the date 616 in words. The reverse bears the legend "*Al-Sulṭān al-Muazzam Shams al-dudyā wa'l-dīn Abu'l-Muẓaffar Iltutmish al Quṭbī Burhān-i-Amīr al-Mu'minīn*", within dotted circle.

(b) The second coin is the same as the first, but dated 614 and bears no mint name. In the reverse legend lettering is slightly different.

2. Silver coins

H. N. Wright includes these coins in Group I under the heading, "Struck in Bengal under the governorship of Hisāmu-d-Dīn 'Ewaz." They are of the same type as the gold coins, the reverse lettering being different. There is no mint-name in either of these coins, but dates 614 and 616 have been deciphered in some of these coins.

Silver coins in which H. N. Wright reads the mint-name ﺑﻨﮑﺮ and includes in Group IV, the date 633 is deciphered.

Beside these gold and silver coins of Iltutmish, that are generally referred to the Bengal origin, there are other silver coins which H. N. Wright includes in Group II, III and IV respectively as described below :—

GROUP II

The obverse bears the *Kalimah* and the name of Khalīfah al-Nāṣir within circle and the reverse bears the name of the Sulṭān.[1] The coins are without any mint-name, the date that may be satisfactorily deciphered is 622.

GROUP III

The obverse bears the *Kalimah* and the name of Khalīfah al-Ẓāhir within circle and the reverse bears the name of Sulṭān[2] in double square within circle or only within circle. These coins are also without any mint-name but dated 624.

GROUP IV

The coins of this group actually belong to a number of varieties, but H. N. Wright records them in one group, because all bear the name of Khalīfah al-Mustanṣir B'illah on the obverse. In only one of them mint Dehlī and date 628 have been satisfactorily established. One variety of these coins is attributed to Bengal which is described above.

From the description it appears that the gold and silver coins of Iltutmish may be broadly divided into two types-horseman type and Khalīfah type. Both Thomas[3] and H. N. Wright[4] attribute all horseman type to the Bengal origin. As for the Khalīfah type of coins, Thomas is inclined to ascribe the group II coins to Bengal origin,[5] but H. N. Wright is silent on this point.[6] The latter attributes to Bengal only one variety of Group IV in which he reads

1. The title is *Al-Sulṭān al-Muaẓẓam*. In No. 50 of this group, H. N. Wright reads *Al-Sulṭān al-Aʿẓam*, but a reference to his illustration shows that the correct reading is *Al-Sulṭān al-Muaẓẓam*, like other coins of this group. (See H.N. Wright : *The Coinage and Metrology of the Sultans of Delhi*, Delhi 1936. hereafter referred to as *Coinage*, p. 17, No. 50).
2. The title is *Al-Sulṭān al-Aʿẓam*.
3. *Initial Coinage of Bengal*, part II, Trubner & Co, London, 1873 (hereafter referred to as *ICB, II*.)
4. *Coinage*, pp. 15-16, 71.
5. *ICB, II*, p. 23.
6. *Coinage*, p. 71.

the mint-name بلكور (ba-Lakor)[1] and Hoernle reads بلكنوتى (ba-Laknauti).[2]

The gold coin supplies the mint-name but its reading is difficult because there is no dot either above or below the first letter. If the dot is put below it becomes بگور (ba-Gaur) but if it is put above, it becomes نگور (Nagaur). Thomas at first[3] read it نگور (Nagaur) but later changed it to بگور (ba-Gaur) "on account of the need of the preposition ب and the discovery of the "concurrent silver pieces."[4] Thomas puts stress on the "need of the preposition ب" but an examination of the contemporary coins, especially those of Iltutmish shows that the insertion of preposition has not been uniformly followed.[5] As for the discovery of the "concurrent silver pieces," the Bihar hoard contains 37 coins ranging from 614-627. So the coins were buried in 627 at the earliest. We know from Minhāj[6] that from 622 to 627 the Delhī Sulṭān invaded Bengal thrice, twice personally (i. e. in 622 and 627) and once through his son Nāṣir al Dīn Maḥmūd (i. e. in 624). During this period the Dehli coins might have been imported to Bengal by the invading force. So simply because the coins were found in the same hoard with those of Bengal there is no justification of attributing the entire series to the Bengal origin.

The reading of بگور (ba-Gaur) by Thomas has been accepted by H. N. Wright[7] and A. F. Rudolf Hœrnle[8] without giving any reason. But the reading cannot be accepted on the following grounds. In the first place, in the whole pre-Mughal period, Muslim historians never used Gaur, but always referred to the place as Lakhnawtī. Secondly Gaur does not appear in any coin or inscription in the whole pre-Mughal Muslim period. Thirdly, during 614-616, Iltutmish could not have issued any coin from Bengal or any part thereof, because as we shall see presently, during this period

1. *Ibid.*, p. 20, No. 52A
2. *Journal of the Asiatic Society of Bengal*, hereafter referred to as *JASB*, 1881, p 66, No. 19.
3. *ICB, II*, p. 14, note 3.
4. *Ibid.*
5. The examples of coin No. 50F, 100-102, 102A, 138-139, 140-141 of *Coinage* may be cited. In No 121-122 of *Coinage*, H. N. Wright reads بدهلى (ba-Dehli) but a reference to his illustration shows that the mint-name is gone.
6. Minhāj-i-Sirāj, *Tabaqāt i Nāsirī*, Bibliotheca Indica (hereafter referred to as Minhaj), pp. 163-174.
7. *Coinage*, pp, 15, 70. Dr K R. Qanungo's view (*History of Bengal*, Vol. II, Dacca University, 1948, thereafter referred to as *HB, II*, p. 39) that H. N Wright "gave up the untenable reading of Gaur" is not correct.
8. *JASB*, 1881, p. 70.

Bengal was independent under an independent Sulṭān. So the mint-name is Nagaur and not Gaur.

Hodivala[1] reads the mint Nagaur, but identifies it with Nagaur in Birbhum district (West Bengal). Though the reading Nagaur is correct in view of foregoing discussion, its identification with Nagaur in Birbhum district is untenable. In the first place, Minhāj does not refer to any place like Nagaur in Bengal but always refers to Lakhnaur (لکھنور).[2] Secondly, as in the case of Gaur, Lakhnaur (or Nagaur in Birbhum) was also never a mint-town. Thirdly, as noted above, Bengal was independent and as such Iltutmish could not have issued any coin from Bengal. The identification of نکور (Nagaur) therefore is to be sought in Northern India and outside Bengal. Minhāj[3] refers to Nagaur in Rajputana in connection with the arrival of Caliph's investiture for Sulṭān Shams al-Dīn Iltutmish. The way in which Minhāj refers to Nagaur in Rajputana shows that it occupied an important position in the administation of Iltutmish. On the strength of these evidences and further evidence, that will be supplied presently, we conclude that the gold coins of Iltutmish were issued from Nagaur in Rajputana and not from Gaur or Nagaur in Bengal.

The silver coins of (Group I of H. N. Wright) are without any mint-name but dated 614 and 616. Nelson Wright is of the opinion that they were issued in the name of Iltutmish by Iwaḍ Khaljī as a governor of Iltutmish. He does not advance any reason for such an opinion except that "The dates on these horseman *tankahs* (A. H. 614 and 616) show that they must have been struck by Hisāmu d-Dīn Ewaz, governor of Bengal in acknowledgement of the claim of Iltutmish to the Sultanate".[4] Obviously, Nelson Wright was led by the notion that Iwaḍ Khaljī was a governor of Bengal under Iltutmish from 614-616. Thomas also holds the same view[5] and says that 'Iwaḍ issued coin in the name of Iltutmish from 614-616, but towards the later part of 616 he dropped the name of Iltutmish and issued independent coinage appropriating the "modest title al-Muazzam". Iwaḍ's coins of 616 bear the specific date 19th Safar.[6] So the view of Thomas that Iwaḍ issued coins in the name of Iltutmish towards the beginning of 616 and issued independent coins towards the end of 616, does not stand. Secondly, no stress should be

1. S. H. Hodivala, *Studies in Indo-Muslim History*, Bombay, 1939, p. 213.
2. *Minhāj*, pp. 162, 163.
3. *Ibid*, p. 85
4. *Coinage*, p. 71.
5. *ICB, II*, p. 16.
6. *JASB*, 1929, Numismatic Supplement, XVII, article No. 284.

laid on the "modest title al-Muazzam," because an examination of the coins of Iltutmish also shows that in most of the coins he used the title "al-Muazzam."[1] All the horseman type of coins bear the title "al-Muazzam". If 'Iwaḍ issued these coins for Iltutmish, he would not have used the "modest title" for his overlord (?). The Khalīfah type coins of Group II also bear the title "al-Muazzam". If "al-Muazzam" is a modest title, we fail to understand why Iltutmish used this modest title and to whom he became modest? As for the theory of the vassalage of 'Iwaḍ, it is not supported by historical facts. According to Minhāj,[2] when Sulṭān Quṭb al-Dīn died, 'Alī Mardān Khaljī assumed independence, took the title of Sulṭān 'Alā' al-Dīn, and read *Khuṭbah* in his own name. After about two years, 'Alī Mardān Khaljī was killed by Khaljī faction of nobles and put Husām al-Dīn 'Iwaḍ Khaljī to the throne. So 'Iwaḍ Khaljī inherited his independence from his predecessor 'Alī Mardān Khaljī and the question of his being governor of Iltutmish does not arise. Minhāj[3] puts the first invasion of Bengal by Iltutmish in 622. 'Iwaḍ met the Dehli Sulṭān with his war-boats. A treaty was concluded by which 'Iwaḍ gave 38 elephants, 80 lakh (tankahs) and agreed to read *Khuṭbah* and strike coins in the name of Iltutmish. But as soon as the Dehlī Sulṭān returned, 'Iwaḍ broke the treaty and captured Bihar from Malik 'Alā al-Dīn Jānī, the Dehlī governor. Iltutmish waited till 624 when he sent his own son Nāṣir al-Dīn Maḥmud who ultimately killed 'Iwaḍ Khaljī and annexed Bengal to Dehlī Sultanate.[4] The account of Minhāj quoted above clearly shows that 'Iwaḍ Khaljī did not submit to Iltutmish till his death. So the view that 'Iwaḍ was a vassal of Iltutmish does not stand and the coins also can not be attributed to Bengal origin.

The silver coin of No. 3 (included by H. N. Wright in Group IV) is dated 633. H. N. Wright[5] reads the mint بلكور (ba-Lakor) and Hoernle[6] reads بلكنوتى (ba-Laknauti), but the difficulty is that the last letter is a clear ر (re) and not تى (tī). S. A. Shere[7] examined one specimen of this coin. He says, "I am of opinion that the correct name of the mint is لكور which is the name of a town near Lakhnauti .....",[8] To identify Lakor, Shere quotes two passages from *Tabaqāt-*

1. *Cf* Gold coins, silver coins of Group I, Group II, No. 50D, 50E, of Group IV (See *Coinage*).
2. Minhāj, p. 71.
3. *Ibid.*, pp. 74, 83.
4. Mināj, p. 75.
5. *Coinage*, p. 20.
6. *JASB*, 1881, p. 66, No. 19.
7. *Journal of the Bihar Research Society*, Vol. XXXVIII, 1952, pp. 491-92
8. *Ibid*, p. 492.

i-Nāṣirī of Minhāj-i-Sirāj. Both the quotations are from Bibliotheca Indica text, one from p. 243, giving the conquests of Izz al-Dīn Ṭughral Ṭughan Khān and the other from p. 245 describing the conquest of Muslim territory by the King of Orissa. Both the passages give the name of the place as Lakor, the headquarters of a *Muqta*, south of the capital city of Lakhnawtī. Minhāj refers to this place on two other occasions, at pp. 162 and 163 giving the boundary of the Muslim Kingdom and conquests of Iwaḍ Khaljī (both in Bibliotheca text) and on both occasions the name of the place is given as Lakhnaur and not Lakor. It appears therefore that the name of the place varies in the text. So before coming to a final conclusion on the identification of the mint-name of the coin, it is advisable to find out the correct reading of the place-name. Commenting on the variation of reading, Major Raverty says "most of the best copies of the text have Lakhnor both here and other places where the same town or city is referred to ; but two of the oldest and best copies have both Lakhnor or Lakhor both here as well as elsewhere".[1] So in none of the manuscripts the name لکور (Lakor) is available ; the name is either لکهنور (Lakhnor) or لکهور (Lakhor). In the case of gold coins, Shere does not read بگور (ba-Gaur) because, "the name of Gaur is not found on coins in that early period of history".[2] Curiously enough, he suggests the reading of Lakhor in silver coins, though Lakor also is never found as a mint town in the whole period of history.

It is now necessary to re-examine the coin in question. The margin is written as follows[3] :—

ضرب هذه الشرده بلکنور فی شوور سنه ثلث ثلثین و شماه

It may be remembered that the dot is the main obstacle in having a correct reading of the mint-name. The absence of dot has made the reading on the gold coin بگور for بکور. As will be found from illustration, in the present coin also, dots are missing in 4 letters They are ب of ضرب, ف of شرفه, last ث of ثلث and last ن of ثلثين. Moreover of the three strokes required for ش of شرفه one stroke is missing, making it more like س. The calligraphy of the margin, therefore, is not free from defect. So it is risky to read ل (lām) in between ب and ک to make it بلکور only because there is no dot. On the other hand on close examination it is found that if a dot was put in between ب and ک, the letter would have been jumbled up without

1. Major Raverty in his translation of *Tabaqāt-i-Nāṣirī*, Bibliotheca Indica, 1880, p 573, note 2.
2. *Journal of the Bihar Research Society*, Vol. XXXVIII, 1952. P. 492.
3. For illustration see *Catalogue of Coins in the Indian Museum Calcutta*, Oxford, 1907, Part I, Plate I, No. 38.

making anything readable. If all these factors are taken into consideration combined with the fact that there is no place like لكور (Lakor), it seems reasonable to read it بنكور (ba-Nagaur), putting a dot just as has been done in the cases of ب of ضرب, ف of شرفه, ث of ثلث and ث of ثلثين. The whole word will then be read as بنكور (ba-Nagaur). Once the mint-name is read correctly, there is no difficulty in identifying it. The coin is from the mint of Nagaur in Rajputana. We have already concluded that the gold coin was also issued from the same mint.

The following facts may also be considered :

(A) The gold coins and the silver coins of (Group I of H. N. Wright belong to Horseman type. In the whole Bengal coinage, not a single piece of this type is available, whereas the type was known in North India e.g. among the Chahmanas. From them the coins were copied by Sulṭān Muizz al-Dīn Muḥammad bin Sām.[1] It is therefore reasonable to say that Iltutmish found the model for these coins in Northern India rather than in Bengal.

(B) The Khalīfah type of coins of Iltutmish were issued from 622 i.e. after his first invasion of Bengal. This type of independent coins were issued in Bengal from 616. A. H. Dani, therefore, observes[2] that both from the view point of "type and time", they were copied from Bengal. The earliest silver coin from Dehlī mint is dated 628. If the horseman type of coins (both gold and silver) are attributed to the Bengal origin, if the Khalīfah type of coins were copied from Bengal, if the earliest coin from Dehlī was issued in 628, the logical assumption is that Iltutmish had no originality in the coinage, which seems to be absurd in view of the power and position held by the Dehlī Sulṭān.

Having examined the coins and the available literary sources, we may arrive at the following conclusions :—

(a) The gold coins of Iltutmish was issued from Nagaur in Rajputana.
(b) The silver coins of horseman type ascribed to Iwaḍ Khaljī were actually those issued by Iltutmish himself.
(c) The mint-town read as لكور (Lakor) is actually Nagaur in Rajputana.
(d) Therefore, Iltutmish did not issue any coin from Bengal.[3]

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1. *Coinage*, P. 6, 67-68
2. *Proceedings of the Pakistan History Conference*, Dacca Session, 1953 (Reprint Section), p. 110
3. Only one coin was issued in the name of Iltutmish by Dawlat Shāh bin Mawdūd identified with Ikhtyar al-Dīn Balkā Khaljī. The coin is dated 627 or 629. See *Coinage*, p. 21, No. 53.A.

ON SOME NEW COINS OF ALAUD-DIN FIRUZ SHAH AND GHIYATHUD-DIN MAHMUD SHAH OF BENGAL

MONIRA KHATUN

Recently I had the opportunity of examining a hoard of silver coins which was found at Mauza Nazirkhani, district-Malda, West Bengal in 1957 and was acquired for the coin-cabinet of the Archaeological Section, Indian Museum, Calcutta. The hoard consists of 68 coins of the Husain Shahi Sultans of Bengal including 8 coins of 'Alāu'd-dīn Ḥusain Shāh, 51 of Naṣiru'd-Dīn Nuṣrat Shāh, 4 of 'Alāu'd-Din Firuz Shāh and 5 of Ghiyāthu'd Din Mahmud Shāh. Most of the coins are in a good state of preservation without being much disfigured by shroff's mark.

The issues of 'Alāu'd Dīn Husain Shāh and his son Nāṣiru'd Dīn Nuṣrat Shāh found in this hoard are all of known types; so nothing particular remains to be said about them. But the hoard presents some unique and so far unknown coins, one of them is a coin of 'Alāu'd-Dīn Fīrūz Shāh, issued from Muhammadabad mint and dated A. H. 938; the others are three fractional issues of his uncle Ghiyathu'd-Dīn Mahmud Shāh. These four coins are described below.

1. Coin of 'Alāu'd-Dīn Fīrūz Shāh

Size: 28 mms. Weight: 10.532 gms.

Obverse

Within two circles
the outer one of dots:

السلطان بن
السلطان السلطان علا
والدنيا والدين ابو
المظفر فيروز شاه
سلطان بن

Reverse

Within two circles
the outer one of dots:

شاه
نصرت سلطان
ابن حسين شاه سلطان
الحسنى خلد الله ملكه
محمداباد ٩٣٨

(Fig. 1)

This coin is interesting for two obvious reasons (i) So far only Hussinābād, Faṭhabād, Nusratābād and Khazānah were the mints of which the coins of Alaud-Din Firuz Shah were known. Muhammadabad had been a well known mint for all other rulers of the Hussain Shahi dynasty; but no coin



1 OBV



2 OBV



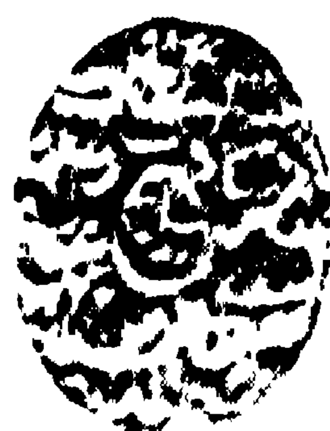
3 OBV



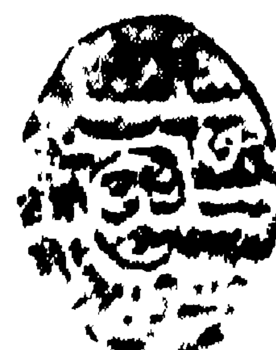
4 OBV



1 REV



2 REV



3 REV



4 REV



Coins of Alaud-din Firuz Shah and Ghiyattud-din Mahmud Shah of Bengal

of this king and of this mint had so far come to light. Now, with the publication of this coin Muhammadabad comes up as a regular mint of the Hussain Shahi dynasty and a new name is added to the mint-list of Alaud-Din Firoz Shah.

(ii) So far only 939, as the date for Alaud-Din Firoz Shah, was known from his coins. Date 938 had been read on a coin of Husainabad mint;[1] but the Editor of the *Museum Journal*, in a note has repudiated this reading of the date. According to him it is 939.[2] But on the present coin there is no reason to doubt the reading 938 It is perfectly clear.[3] This new date for the ruler, brings to forelight the question of the reign period of Alaud-Din Firoz Shah.

Among the early historians only Ghulām Husain gives a brief account of Fīrūz in his *Riyādus Salātin*. According to him Fīrūz could rule only for three years,[4] for his uncle Mahmud put an end to his reign by murdering him and occupying the throne of Bengal. But Stewart who based his History of Bengal on Ghulām Husain's work before its publication in 1890 in the Bibliotheca Indica series, mentioned three months as the duration of his rule.[5] This latter view was endorsed by Blochman and Marsden. Even Abdus Salam, the English translator of *Riyād*, thought that Stewart must have found three months in the manuscript copy of the *Riyad* he consulted. Subsequent scholars were more willing to accept this latter view and whatever epigraphic and numismatic records of this Sultan were found so far also supported it. It may be mentioned in this connection that only one stone inscription dated 1st Ramadan, A. H. 939.[6] (=27th March, A. D. 1533) and coins issued in the same year were known of this Sultan until recently.

When on a coin issued from Husainabad mint the year A. H. 938 was read S. Sharafuddin, on its basis showed

1. *Museums Journal*, Peshawar, IV, No. 1, 1952: *Varendra Researah Society's Monograph*. No. 6, p. 18.
2. *Museums Journal*, IV, No. 1, 1952. [Abdul Karim in his recently published work *Corpus of the Muslim Coins of Bengal* has refered to this coin. He had personally examined the coin. He says that 'the middle figure i e. ٣ is clear, the two side figures are inscribed in such a way that thev look more like angles. But if for this reason the last figure is taken for ٨ the first figure should also be taken as such and the date becomes ٨٣٨....The figure therefore stands for 9 and the date is 939.' *P L G*]
3. Abdul Karim, has discovered two coins of this very type, mint and date in the Dacca Museum. *Corpus of the Muslim Coins of Bengal*, p. 129. *P L.G*]
4. Ghutām Hussin, *Riyādus-Salātin* (Cal 1890), p. 139.
5. C. Stewart, *History of Bengal* (London. 1813), p. 118.
6. In 1958, another inscription of this Sultan, bearing the same date was collected by the writer from Kalna, district Burdwan, W. Bengal. It is now preserved in the Indian Museum.

that it was "not unreasonable to assume that Alauddin Firuz Shah reigned for three years (i. e. A. H. 938–940= A. D. 1531–1533) at Gaud, as recorded in the Calcutta edition of the *Riyaz* and not merely for three months."[1] M.R Tarafdar also do not share with the view that Alaud-Din Firuz Shah ruled only for three months; but at the same time he is not agreeable to the suggestion of his three years' rule. He has found mentioned in Buchanan Hamilton's Pandua manuscript that "Firuz Shah governed nine months, when he was killed by his uncle." So, pointing out to two coins of Muzzamabad mint bearing the date 938 and Firuz Shah's inscription dated in 1st Ramadan, A. H. 939, he has suggested that Firuz Shah ruled for nine months (Ramadan being the ninth month).[2]

Whatever might be the true historical position, the present coin leaves no doubt that Alauddin Firuz Shah ruled for more than three months and atleast for nine months; and it is not unlikely that he might have ruled for some period more.

Among the other coins of this Sultan found in this hoard are two rare issues from Fathabad mint, one specimen of which is preserved in the British Museum.[3]

2. Half tankah of Ghiyathud-Dīn Mahmud Shāh

Size: 20 mms.; Weight: 5.4205 gms.

Obverse	*Reverse*
In a circular area :	In a circular area :
	السلطان بن
السطان بن	شاه سلطان
السلطان غياث	حسين
الدنيا و الدين	خلد الله
ابوالمظفر محمود شا...	ملكه و سلطانه
In centre within a small circle : بدرشاهی	حسيناباد
	In centre within a small circle : بدرشاهی

(Fig. 2)

3. One-fourth tankah of Ghiyāthud-Dīn Mahmūd Shāh

Size: 16.5 mms.; Weight: 2.6710 gms.

1. S. Sharafuddin, A note on the reign of Alauddin Firuz Shah III of Gaud. *Varendra Research Society's Monograph* no 6, p. 18.
2. M. R. Tarafder, Dates of Alauddin Firuz III and the chronology of the Husain Shahi Sultans of Bengal, *Journal of Asiatic Society of Pakistan*, Vol. IV, 1959.
3. Lane-Poole, *B M C*, Muhammadan States, p. 53, no. 146.

Obverse	***Reverse***
In a circular area :	In a circular area :
السلطان بن	شاه سلطان
السلطان غياث	بن حسين شاه
الدنيا و الدين	السلطان خلد الله
ابوالمظفر محمود	ملكه و سلطانه
In centre within a small circle : بدرشاهی	In centre within a small circle : بدرشاهی

(Fig. 3)

4. One-sixteenth tankan of Ghiyathud-Dīn Maḥmūd Shāh.

Size: 11 mms.; Weight: 0.6925 gms.

Obverse	***Reverse***
As on no 3, but mostly cut off.	As on no 3, but mostly cut off.

(Fig. 4)

As the obverse and reverse of these coins show, they bear the same common legend as found on the 'Badar Shahi' tankahs of the Sultan, only the arrangement of the lines is different. Their weights correspond roughly to the $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{16}$ part of the tankah of the same type.

Before the discovery of these coins, silver coins of smaller denominations were not known. Even there was no copper coinage of the Bengal Sultans, except a single copper coin of Sultan Ruknud-Dīn Bārbak Shāh.[1] It is generally believed that the small currency of Bengal consisted of cowrie shells. Wright says: "The currency of the Bengal kingdom consisted mainly of silver tankas of the old style, cowries taking the place of copper. Only a sprinkling of gold tankahs can have issued, for they are comparatively very rare,"[2] Now the discovery of these specimens of fractional coins issued by Sultan Ghiyāthud-Dīn Maḥmūd renders this belief untanable. Unfortunately none of these coins are dated, at least date portion is not seen on the coins. Only ths mint name Husainabad occurs on the $\frac{1}{2}$ tanka. However, it is definite that these coins were issued before A. H. 945, when Shēr Shāh occupied the throne of Bengal by defeating Maḥmūd; and it is also evident from their appearance that they were in circulation, as all of them bear marks of wear and tear besides the half-

1. Shamsuddin Ahmad. A supplement to Vol II of the *Catalogue of coins in the Indian Museum*, Calcutta, p. 62, no. 154.
2. H. N. Wright, *The Sultans of Delhi. Their coinage and metrology* p. 382.

tanka having a shorff's mark on it. When did Maḥmūd actually introduce the fractional coinage can be known only when dated specimens are found. The credit of introducing fractional coins upto the sixteenth part of a tankah, in the sphere of small currency of Bengal will go to him till othewise proved.[1]

1. It may be mentioned in this connection that a half-rupee (W. 81 grs) of Sikandar Shāh son of Iliyās Shāh of Bengal is known. It was published by R. Burn in *NS*, VIII (55), p. 587.

ON SOME NEW AND RARE BAHAMANI COINS

DINKAR RAO

[Pl. XIII]

1. A Coin of Ahmad Shah Bahamani

Sultan Ahmad Shah I was the ninth king of Bahamani kingdom of the Deccan. He succeeded his brother Firoz Shah Bahamani. His regnal period has been shown by all historians as 825-838 A. H. (1422 to 1436 A.D.). But some of his coins bearing dates prior to 825 A. H. have been discovered.

One such coin of Ahmad Shah I dated 823 A.H. has been published by late Taraporevala of Hyderabad in this *Journal* (ante, Vol. II, p. 127) saying that this Sultan had started his own coinage, two years before his accession, when he was engaged in a war with his brother Firoz Shah, who was still on the throne of Bahamani kingdom.

According to Ferishta, Firoz Shah had nominated his son, Hasan Khan, as his successor. But he was an incapable and dissipated youth. Ahmad Shah was brave, capable and popular in the kingdom. At the instigation of some of his courtiers, Firoz Shah was planning to get rid of Ahmad Shah, as he feared that the latter might seize the throne after his death and deprive his son. Knowing this secret, Ahmad Shah fled away from the capital by night along with his four hundred trusted followers and camped at a village called Khanapur. It is said that at this place he was crowned by his associate followers and troops were gathered here to face further eventuality. When Firoz Shah came to know of this flight, he sent his army in pursuit. Consequently, Ahmad Shah came in conflict with his brother's army and was miraculously successful in it, which ultimately made him successor to the throne of Bahamani kingdom.

I have a copper coin of Ahmad Shah I in my collection, on which the date 822 is clearly visible The legend on its obverse and reverse are the same as found on one of the common types of his published copper coins. Its description is given below :

Metal: copper; Shape: round; Weight: 80 grs.; Size: 0·6″.

Legend:

Obverse	***Reverse***
المنصور	ابوالمغازی
بنصرالله	احمد شاه سلطان
المنان	۸۲۲

(Pl. XIII. 9)

The discovery of this coin, with date 822 A.H. on it, tends to suggest that Ahmad Shah I had started minting coins in his own name from 822 A. H. or even earlier, probably from the date of his assumption of kingship at Khanapur (as mentioned above), since striking of coins was considered as a royal prerogative and formed a part of the crowning ceremony among the Muslim rulers.

2. A Coin of Humayun Shah Bahamani, Dated 866 A. H.

The reign of Sultan Humayun Shah Bahamani has been shown by historians as 862 to 865 A. H. and that of his son and successor, Nizamshah, as 865 to 867 A. H. But no coin of Nizamshah Bahamani (Ahmad Shah on the coins) of the year 865 A. H. has so far been traced, while his coins dated 866 and 867 A. H. are known.

There is a copper coin of Sultan Humayun Shah Bahamani dated 866 A. H. in my collection. The figures of the date are quite clear, leaving no room for any doubt. It is of the usual known type with the legend found on his big copper coins. Its description is given below:

Metal: copper; Shape: round; Weight: 252 grs.; Size: 0.9″

Legend:

Obverse	***Reverse***
المتوکل	[علاالدنیا و الدین]
علی الله القوی	همایونشاه بن احمد
[الغنی ابوالمغازی]	شاه بن احمد شاه
	الولی البهمنی

(Pl. XIII. 10)

The date 866 on this coin tends to show that Humayun Shah Bahamani actually lived and ruled in the year 866 A.H; and probably later in the same year, his son, Nizamshah succeeded him to the throne, after his death. According to Farishta, Humayun's father, Allauddin Ahmad Shah II died in 862 A.H. and the regnal period of Humayun Shah was 3 years,

6 months and 6 days. Thus, by calculation, it is possible to suggest that Humayun Shah ascended the throne in the latter half of 862 A. H. and his rule ended in the beginning of 866 A. H., so as to cover the regnal period of 3 years, 6 months and 6 days. The fact that no coin of Nizamshah dated 865 A. H. has so far been traced, supports this suggestion.

It is generally accepted that the coins have proved corrective evidence to the historical facts. Thus, on the basis of the discovery of this coin, the regnal period of Humayun Shah Bahamani should now be taken as 862 to 866 A. H. and that of his son Nizamshah as 866 to 867 A. H.

3. Two Copper Coins of Mahmood Shah Bahamani

Sultan Mahmood Shah Bahamani was the fourteenth king of the Bahamani kingdom of the Deccan, with its capital at Bidar. He ruled from 887 to 924 A. H.

Six types of his copper coins are known and have been published by Speight in the *Islamic Culture* (April, 1935). Out of these six types, three belong to a distinct group (variety) with the obverse legend beginning with المتوکل علی اللہ. These three are denominations of different weights (240, 160 and 80 grs.). Further two types, on which the legend on the obverse begins with المؤید بنصر اللہ may be regarded as the second group (variety). The weights of these two types are on an average 150 and 75 grs. Just as there are three denominations of the first variety, there might have been three denominations of the second variety also. But, only two denominations of the second variety are so far known and published and the third (type) denomination, obviously the heavier type, has not been brought to light and published as yet. The sixth type is a tiny coin, weighing about 40 grs. with بن محمد شاہ on the obverse and محمود شاہ on the reverse, which may be regarded as the lowest denomination, common to both these varieties. Besides, some flukes have been reported in this *Journal*.[1]

I publish here two coins from my collection, both of the second variety (group) of the copper coins of this ruler. One is of the heaviest weight and is quite new and forms the the seventh type; the other is of the lowest weight. The latter, though not unknown, is rare.

1. Vol. XIX, p. 78; XX, p. 226.

(i) Metal: copper; Shape: round; Weight: 230 grs.; Size: 0.8".

Legend:

Obverse	***Reverse***
المويد بنصر الله	د شاه
الملک الد(یا)ن)	محمود • محمد
[المنان]	بن
	[شاه] السلطان (Pl. XIII. 11)

(ii) Metal: copper; Shape round; Weight: 72 grs.; Size: 0 6".

Legend:

Obverse	***Reverse***
المويد	السلطا|ن|
الله	محمود (Pl. XIII. 6)

4. A Coin of Kalimullah Bahamani

Seven varieties of copper coins of Sultan Kalimullah Bahamani of different sizes and weights have been brought to light so far. Five of them were published by Speight,[1] the sixth by H. Kaus,[2] and the seventh by A. M. Siddiqui.[3]

The smallest of these coins has the regal title (السلطان) on the obverse and the name of the king (کلیم الله) on the reverse. The remaining six may be classified under two types according to their obverse legends, beginning with (1) المويد بنصر الله and (2) المتوکل علی الله. Three different sizes of each type are known. One or two words of the legend, known on the largest varieties of both the types, are absent on the coins of their smaller varieties. Possibly, this is due to want of space.

A coin of the second type, from my collection, with a slight variation in the legend, is described below:

Metal: copper; Shape: round; Weight: 254 grs.; size: 0.8".

Legend:

Obverse	***Reverse***
علی الله	کلیم الله
المتوکل	السلطان بن
القوی الغنی	محمود شاه
	[البهمنی] (Pl. XIII. 7)

Although the last word of the reverse legend *Al Bahamani*, shown above in brackets, is not seen on the coin, we may well assume that it was intended to be included, as it is necessary for rhyming with the last word of the obverse legend *Al Ghani.*

The present coin thus constitutes the eighth variety of the coinage of the last Bahamani Sultan Kalimullah.

1. *Islamic Culture*, 1935, April.
2. *JNSI*, Vol. VII, p. 62.
3. Ibid., Vol. XX, p. 227.

SOME OBSERVATIONS ON MARATHA COINS

MONIRA KHATUN

[Pls. XII & XIII]

A hoard of 251 silver and 9 copper coins was found at Ellora caves by the Department of Archaeology in 1957. All the silver coins, except two, are Maratha coins belonging to two distinct series. 235 coins are those that are known as Chāndorī rupee and 14 are the Aṅkuśī rupees. The remaining two coins also are the issues of native States. One of them probably belongs to Hyderabad, as the dagger, typical of that mint, is seen on this coin.[1] The other coin has a full Mughal legend on the obverse; the reverse bears the name *Dār-ul-Khilāfat Shāhjahānābād* and is dated A. H. 1201 and R. Y. 29 It bears an umbrella mark on the obverse in the loop of the letter ى. On the reverse are three marks, (i) a dagger pointed above in the loop of the letter س of the word جلوس; (ii) the letter श्री below the regnal year; and (iii) a semi-circle with two prongs to the right of the word مانوس. It could not be possible for me to attribute it to any native state.

Of the nine copper coins, one is a token coin of Muhammad Bin Tughluq issued from Dhār mint; two are Chhatrapati coins and the remaining six are native State issues, and are unattributable to any particular State for want of sufficient indications It is not unlikely that they are Maratha.

The present paper is confined to some observations on Maratha coins, in the light of the coins found in the present hoard.

I. Chāndorī Rupee

Obverse	*Reverse*
شاه عالم	مانوس
بادشاه غاز	میمنت
ی	سنه جلوس ضر
سکه مبار	ب
	......نگر چاندر

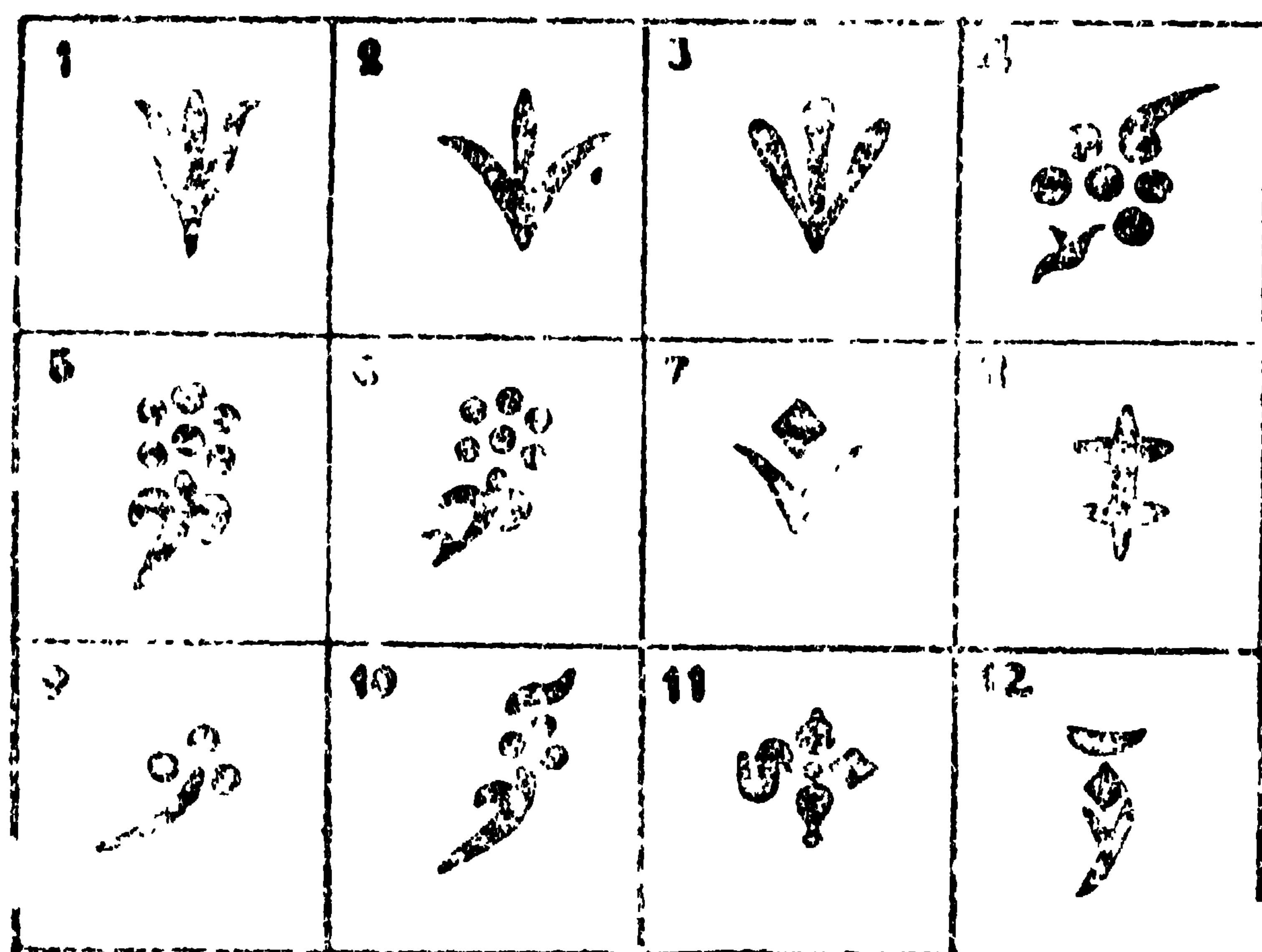
The above legends are restorations, based on a number of coins, as on no coin the full legend is found. The legends are usual; a few words however seem necessary, about the mint name. Mint name چاندر (Chandar) was read earlier on a coin from

1. Cf. Princep, *Useful Tables*, p. 56, No. 91, Pl. III.

the Indian Museum Cabinet by Valentine.[1] But G. H. Khare, who published some Maratha coins in this Journal[2], did not find any coin on which he could read Chāndar or Chāndor. Here, the mint name is clear on some coins. The word چاندر is clear on coin, **Pl. XII 9**, and/or on coin, **Pl. XII. 10**. There are some more letters preceding the word Chāndar, which are very crudely inscribed. On some coins, they have been obliterated by the Shroff marks and on others, they are out of the flan. But I could read نگر (Nagar[3] on some of these coins **Pl. XII. 9** and also on the coin published by Valentine.[4] The word is preceded by a few more letters, on the decipherment of which alone the complete name can be made out.

The coins in the present hoard bear, in all probability, five marks on the reverse and one mark on the obverse. The reverse marks are as follows :

MARKS ON MARATHA COINS.



(i) A three-pronged mark just above لو of the word جلوس. It is found in three forms (marks 1, 2 and 3). Mark No. 1 may be seen on coin, **Pl. XII. 11** mark No. 2 on coin, **Pl. XII. 12** and mark No. 3 on coin **Pl. XII. 13**. But it is difficult to say if the three marks are different or are mere variants of any one of them. However, mark No. 2 is found on most of the coins. The other two are rare.

1. *IMC*, IV, p. 357, Coin No. 5.
2. *JNSI*, Vol. IV, p. 73.
3. [What Monira Khatun proposes to read as نگر is really عر of عرف *urf* (alias). And this عرف is preceded by the name ظفرآباد *Zafarābād* on a coin of this very type, though not with all the marks described in this paper, in the Prince of Wales Museum, Bombay. Towards the end, چا is clear. This shows that the Maratha mint Chandor was also known as Zafarābād.—*P. L. G.*]
4. *IMC*, IV, p. 347, Coin No. 5.

(ii) A flower like mark in the loop of the letter س of the word جلوس. Khare has given five forms of this mark.[1] But I could see only three on the present coins and only two of them (marks 4 and 5) are similar to his marks 5 and 1 respectively. As such, our mark No. 6 is quite new, which may be seen on coin, **Pl. XII. 14**.

(iii) Khare has described "a sword with its hilt downwards" as the mark in the loop of س of the word مانوس in the top line. On most of the coins, the portion having this part of the legend is out of flan; on the few, where by chance any portion of this part of the legend survives, the mark is in most cases only partial. As such, Khare was unable to visualise the correct form of this mark. This mark (No. 8) is fully punched on coin, **Pl. XII 12.**

(iv) The fourth mark is visible to the right of ج of the word جلوس. Two other marks Nos. 9 and 10) are found on the reverse of coins, **Pl. XII. 15 and XIII. 1.** These marks were not found by Khare on the coins examined by him.

(v) A fifth mark (No. 12) appear to the left of ضر. What Khare thinks to be ب of ضرب, is, I think, the part of this mark, and what he took to be "a flat curvature" just above the mint name, is really ب of ضرب. This is clear on coin **Pl. XIII. 2.**

The mark No. 7 on the obverse does not seem to have found any attention so far. It is seen over غا of the word غازی on coin No. 7.

II. Aṅkuśī Rupee

Obverse	*Reverse*
شاہ عالی گوهرے	مانوس
بادشاہ غاز	میمنت
ی	سنه جلوس
سکه مبار	ضرب
	......اباد پونه

The legend and the mint mark (No. 11)—a goad in the loop of س of جلوس—are well known and need no comment. As regards the name of the mint, Khare, while recording the results of his examination of the coins from Bhore State and Poona Court of Wards, has refuted the suggestions of Justice Ranade and Princep that these coins were struck at Wai and Poona. According to him, these coins bear the name *Bāgalkot*. Of the fourteen coins of this type in the present hoard, the mint name is partly visible on only two **(Pl. XIII. 3-4)**. So they are not very helpful in verification of

1. *JNSI*, Vol. IV, p. 73.

Khare's assertions. But five other coins of the same type in the Indian Museum Cabinet, which Valentine has ascribed to Wai mint, throw considerable light on the problem.[1] The word پونه can be made out from what is visible on one of them. These coins in all probability were issued from Poona mint. A careful study of the coin illustrated by Khare shows that what he has read as *Bāgalkot* is really *Ābād Pūnah*, i.e., Muhiābād Poona.

The Chāndorī rupees of the hoard are 20 to 22 mms. in size and 10·92 to 11·81 gms. in weight. Similarly, the Aṅkuśī rupees are 22·32 to 21·59 mms. in size and 11·01 to 11·23 gms in weight.

A few of these coins bear Nāgarī letters, such as ज, नौ, कौ and ग, counter-struck as Shroff marks.

1. *IMC*, Vol. IV, p. 209 ;

A MEDIEVAL COIN OF ARAKAN

ABDUL KARIM

[Pl. XIII]

Jnanendra Barua, Asstt. Head Master, Ramu K. H. E. School, Chittagong, discovered a medieval Arakanese coin from Ramkot, half a mile away from the headquarters of the Police Station of Ramu in Chittagong district (East Pakistan), and kindly sent it to me for examination. The place from where the coin has been discovered is of immense historical importance. The Arab geographers[1] of 8th to 10th centuries A. D. referred to the kingdom of Ruhmi (or Rahmi), which some scholars identify with Ramu in Chittagong district on the coast of the Bay of Bengal.[2] The word *Ramma* found in some works of Tibetan scholar Lama Taranath (born A. D. 1573), has been taken by some scholars to mean the kingdom of Ramu.[3] But a careful examination of the passage in question shows that the word is a corruption of the Sanskrit word *Ramya* (beautiful) and does not stand for any kingdom. The passage is put below:

> "Cāṭigrāma was an important city of Bengal in that early period. The country to the south of Tripura and north of Rekhau (Arakan) was Ramma (Sanskrit *Ramya*), the land of the picturesque sceneries. It was the headquarters of Buddhism after the decline of Nalanda. In the city of Cāṭigrāma or Cāṭigāṅ there was a large Buddhist monastery called Paṇḍita-Vihāra."[4]

The Buddhist scholar does not seem to have been in confusion in the geographical location of Chittagong. In another place he says, "To the south of Cāṭigrāma was the kingdom of Rekhan or Arakhan".[5] The statement goes against the suggestion that *Ramma* stood for Ramu or for any kingdom in between Chittagong and Arakan. But Ramu occupies a prominent place in the accounts of European travellers. Ralph Fitch joins Ramu (Rama of Fitch) with Recon (Arakan) in the same kingdom and places both under the Maghs. Ralph Fitch also says that the Maghs were always at war with the king of Tippera, the

1. Elliot and Dowson, *History of India as told by its own Historians*, Vol. I, p. 5.
2. Cf. *IHQ*, Vol. XVI, 1940, pp. 232-34.
3. Ibid.
4. *JASB*, 1898, p. 24.
5. Ibid., p. 22.

former being in a stronger position "so that Chatigan or Porto Grande is often times under the king of Recon".[1] According to Sebastian Manrique, Ramu was the headquarters of a governor of Arakan and travellers from Dianga (opposite modern Chittagong town) to Arakan by inland water-ways had to pass through this town. Manrique himself enjoyed the hospitality of the Arakanese Governor.[2] Today, the local people call it Ramkot, reminiscent of the old traditions and ruins attached to it.

We now describe the coin : **(Pl. XIII. 5)**

No. 1. Silver, size $1\frac{1}{8}''$, weight 156·8022 grains.

Obverse : Within a double circle, the circles spanned by dots, bear the following legend in Burmese script :

[illegible]

Translation :

"963 (Burmese era = A. D. 1601), Lord of the white elephant, Lord of men and land, Salim Shah."

Reverse : Within circle, divided into two parts, upper part having Arabic script and lower part having Bengali script :

Upper part :

صاحب لفيل

[correctly صاحب الفيل]

بيض • ملک العادل

[correctly البيض; the reading of العدل is not clear.]

سليم شاه سلطان

1. *Early Travels in India, 1583 1619*, edited by William Foster, Oxford University Press, 1921, p. 26.
2. *Travels of Sebastian Manrique*, 1626-1643, Vol. I, Second Series Vol. LIX, Hakluyt Society, London, 1926, p. 94.

Translation :

"Salim Shah, Lord of the white elephants and the just king."

Lower part :

धवल गजेश्वर
श्री श्री शलिम
साह्।

Translation :

"Lord of white elephants, Śrī Śrī Salim Shāh"

A. P. Phayre published a similar coin in the *JASB*, 1846, and called it the 'oldest historical coin of Arakan'. He read the obverse but could not decipher the reverse and took it "to bear some unintelligible compound of Persian and Nagri letters."[1] But, as may be found in the plate, the reverse is not at all unintelligible. The upper part of the reverse bears Arabic legend, though grammatically incorrect, but the lower portion bears in Bengali the king's title both grammatically correct and intelligible.

This coin reveals an important chapter of the relation between Bengal Sulṭāns and Arakan Kings and the influence of the former over the latter. The Arakanese sources as examined by A. P. Phayre[2] and G. E. Harvey[3] reveal that, ousted by the Burmese king Meng Khamaung, the Arakanese king Meng Soamwun took shelter in the Bengal court in about A. D. 1404. The fugitive king remained there for a pretty long time till at last he got back his throne in A. D. 1430, with the help of the Bengal Sulṭān.[4] Out of gratitude, the Arakanese king agreed to pay tribute to the Bengal Sulṭān.[5] The restored king died soon after and the subordinate position of Arakan to Bengal also did not last long.[6] But from this time onward, the Muslim influence in Arakan was clearly manifested. The Arakanese kings not only copied the Bengal coin-type (as against their symbolical coins) but also began to take Muslim titles in addition to their own Buddhist names The following is a list of Muslim titles held by the Arakanese kings :[7]

1. *JASB*, 1846, p. 233.
2. Phayre, *History of Burma*, London, A. D. 1883.
3. Harvey, *History of Burma*, Longmans, Green & Co., 1925.
4. Phayre, *op. cit.*, p. 78 ; Harvey, *op. cit*, p. 139.
5. Phayre, *op. cit.*, p. 78.
6. Ibid.
7. Phayre, *op. cit.*, p. 173 ; Harvey, *op. cit.*, p. 140 ; *JASB*, 1846, pp. 232–234.

	Buddhist name	*Muslim title*	*Date*
1.	Basawpyn	Kalima Shāh	1459–1482 A. D.
2.	Meng-beng (Minbin)	Sulṭān	1531–1533 A. D.
3.	Meng-Phalaung	Sikandar Shāh	1571–1593 A. D.
4.	Meng-Radja-gyi	Salim Shāh	1593–1612 A. D.
5.	Meng-kha-moung	Husain Shāh	1612–1622 A. D.

The coin under discussion is the one issued by No. 4. i. e. Meng-Radja-gyi in 1601. In the 17th century, the Arakanese court patronised the Bengali literature and two famous Bengali Muslim poets, Dawlat Qazi and Alawal, wrote their books from Arakan. From their writings we also know that the Arakanese kings appointed Muslim officers, including ministers. The present coin therefore reveals one aspect of the relation between Bengal and Arakan and the influence of the former upon the latter.

RUPEES OF THE NAWABS OF ARCOT FROM MINTS IN ADMINISTRATIVE REGIONS CONTROLLED BY LOCAL GOVERNORS APPOINTED BY THE NAWABS

C. H. BIDDULPH

[Pl. XIV]

In my paper dealing with rupees of the European Companies and the Nawabs of Arcot in the Madras Presidency (*JNSI*, Vol. XXXI, p. 146-173) an attempt was made to describe the main type and also to account for certain rupees which appear to have been coined by the English East India Company and the Nawabs at Pondicherry.

In the original paper it was considered advisable to omit descriptions of certain rupees, which owing to their rarity are seldom seen, although some of them have been described and illustrated in articles published in the ***Numismatic Supplements*** of the Asiatic Society of Bengal.

These rupees have invariably been attributed to Aurangzeb Alamgir I from certain less well known mints in the Madras Presidency and in a few instances, though the names of the mints have been read, difficulty has been experienced in identifying the towns to which they refer and their claim to have actually been Mughal mints. A few instances will be quoted where, although the name of the mint has been read on the coin, it was not possible to identify the town. In another instance, two coins have been illustrated, but it had not been possible at the time to read the names of mints. These occur in a paper entitled "Some Coins from the Limbdi Treasury" by G. P. Taylor, which appeared in the *Numismatic Supplement*, No. XIV, No. 84.

In the first instance, a reference was made to two rupees bearing the mint name of Mahmudbandar of the year A.H. 1119, R.Y. 51 (Figs. 2 and 3. Pl. XXXV) and the author remarks:

"Where this 'Mahmud Bandar' was situated is unknown to me."

In a note in connection with these coins he also states:

"My cabinet has long held an Aurangzeb rupee of the regnal year 4(x) that was struck at 'Islam Bandar'. This 'bandar' too baffles me."

Again in the text of the same article, the author, when referring to two rupees which are illustrated on Plate XXXV, Nos. 4 and 5, states:

"Yet two other rupees, one dated 30-A.H. 1098, and the other 4 (X)--A.H. 1109, are of the ordinary type, but in each case I have failed to read the mint recorded. In the hope that some coin collector may be able to suggest a correct reading of these names, the two reverses are shown as figs. 4 and 5."

The author has in the same *Numismatic Supplement*, Article No. 85, in "A Post-script to the Article on Some Coins from the Limbdi Treasury," stated:

"May Mahmud Bandar be Porto Novo on the Coromandel Coast? Only yesterday I had the good fortune here in Bombay to pick up a copy of that rare book, Alexander Hamilton's *New Account of the East Indies* (1727) and turning over its pages I hit upon the following relevant passage:

'The next place of commerce is Porto Novo, so called by the Portuguese, when the sea coasts of India belonged to them; but when Aurangzeb subdued Golcondah and the Portuguese affairs declined, the Mughal set a 'Fouzdar' in it and gave it the name of Mahomet Bandar. The Europeans generally called it by its first name and the natives by the last.' (i. 350)."

Taylor, in an interesting article in *Numismatic Supplement*, No. XXII, No. 104, has again furnished details which appear to supply an answer to his own query in connection with a rupee of Islam Bandar mint mentioned by him in his article in *Numismatic Supplement*, No. XIV, No. 84. As the information is from more than one source and the conclusion that this Islam Bandar may have been the port from which the coin under reference originated is not definitely established, it may be better to reproduce extracts from the particulars furnished.

"The Hijri year is wanting but the regnal year 4 (X) determines the date of issue as falling between A. H. 1108 and 1118 (A. D. 1696-1706)."

"The location of Islam Bandar remained for long a puzzling problem but we have, I think, at last arrived at its solution. In a recent letter, my kind friend, Mr. Henry Cousins, M. R. A. S., writes:

'I have an old native map of Bijapur City, just covered with marginal notes in Persian, which I have had translated. On it are scores of names of Muhallas and villages of

Aurangzeb's time with their revenues. One of the entries is Islam Bandar, alias Rājāpur.

'I had better give you the translation of this part of the note which is a long one. It runs thus:

'The port Khal Bati (Bhatkal?) 7,000, the port Chapūl (Chaul ?) 15,000, the port Sank 10,000, the port Guwa (Goa) 37,000, which after a short time passed again into the possession of Christians. Islam Bandar, alias Rājāpur, twenty gold dinars, port Sasti 10,000, port Kharapaltan 5,000, port Harchari 5,000, port Satuli 3,500, port Muhammadabad, alias Shadut, 5,000, port Khabra 5,000."

'The Rājāpur of this note is today the capital of the ta'alluqa of the same name in the Ratnagiri collectorate. It stands at the head of a tidal creek, 30 miles south east of Ratnagiri town and about 15 miles from the sea.'

'Mandelslo bears testimony to the importance of this place in his time (1639). Speaking of Ceitapour (Jaitapur), the haven at the mouth of the creek, he declares:

'It is no doubt the best in all the coast for casting anchor, behind the island which shelters it, you need not fear being exposed to any wind', and then adds—'Three leagues thence lyes the city of Rasapour, which is one of the chiefest maritime cities of the Kingdom of Cuncan.' '(*Voyages and Travels* by J. Albert Mandelslo, rendered into English by John Davies of Kidwelly (1662), p. 92.'

"Some ninety years later, 'Captain' Alexander Hamilton could write:

'There is an excellent harbour for shipping 8 leagues to the southward of Dabul (Dābhol) called Sanguseer (Sangameshvara), but the country about being inhabited by Raparees, it is not frequented, nor is Rājāpore, about 7 leagues to the southward of Sanguseer, tho' it has the conveniency of one of the best harbours in the world. (*A New Account of the East Indies* by Captain Alexander Hamilton, (1727), Vol. I, p. 241)'

'Here in 1637 Courtens' Association settled an English Agency and here too in 1670 Joseph Deslandes founded a factory in the interests of the French Company.'

'Vessels used to sail direct from Rājāpur to Persia and Arabia and for this reason doubtless that port received the name of Islam Bandar; just as Surat had come to be called Bandar Mubarak, 'the blessed port'. Orme tells of Aurangzeb's rebellious son, the Sultan Akbar, that he hired at

Rājāpur a ship commanded by an Englishman named Bendal, and, as soon as the monsoon was changed in October, embarked on her for Muscat, arriving there safely the following month. (*Historical Fragments* by Robert Orme, 1808, p. 150)

"It is interesting to note that at the period when Islam Bandar mint was striking rupees in the name of Aurangzeb, (*Cir.* A.H. 1112), that monarch was campaigning in the neighbourhood of Rajāpur."

"No express mention is made of the submission of Rājāpur, but we may safely assume that this town, too, acknowledged, for a time at least, the sway of Aurangzeb."

Taylor mentions another Rājāpur on the Konkan Coast, but gives reasons why he does not consider it to have been Islam Bandar. As it would make this reference unduly lengthy, it is not being included.

The claim of the West Coast Islam Bandar, alias Rājāpur, as the mint responsible for the rupee under discussion, requires examination before it can be accepted, as some of the arguments are not particularly convincing.

The approximate date of the coin which has been determined from the regnal year which is 4 (x), lies within the period A. H. 1108 and 1118 (A. D. 1696-1706) and this would seem to fit in with the Emperor's movements in the area, as it is known that Aurangzeb was campaigning against the Marathas in the neighbourhood of Rājāpur about the year A. H. 1112. There is however no mention of the submission of the town and it may not be safe to "assume that the town also acknowledged, for a time at least, the sway of Aurangzeb." Even if it had been captured it would have been a place of much less importance at the beginning of the eighteenth century than it was earlier and there were many other ports on the coast which were being used more freely. This is confirmed by Captain Alexander Hamilton who refers to it early in the eighteenth century as a port which was not frequented due to the undesirable inhabitants of the area.

The map in the possession of Henry Cousins, with its marginal notes in Persian, would appear to have had the names of several muhallas and villages of Aurangzeb's time with their revenues The figures against each must be with reference to some monetary unit and if this is actually the case, the revenue of Islam Bandar, which is recorded as twenty gold dinars, would appear to be trivial. Even supposing the

figures for the other places are quoted in rupees, the revenue of Islambandar would be so small that it need hardly have been mentioned.

The necessity for a Mughal mint in an unimportant port has not been furnished and it is doubtful if he did actually mint rupees at Islam Bandar.

If Rājāpur had been captured by Aurangzeb about the year A. H. 1112 (A. D. 1700), its original name must almost have been forgotten, as it is stated in *Voyages and Travels* by J. Albert Mandelslo that the town was called Rasapour about the year 1639.

Again, from *The Travels of Peter Mundy in Europe and Asia, 1608-1667*, Vol. V, which covers the period 1658-63, when he visited the West Coast of India, we find the port was known as Rājāpore. His reference in this connection reads:

"Rajapore near Vizapur (Bijapur) south of Dabhol, which is a small port on the coast, south of Bombay, Long. 17½° (approx.)"

It may be suggested that the best way to ensure an easy acceptance of the currency by local inhabitants would have been to use the name of Rājāpur, rather than to re-introduce its earlier Muslim name, although it can be understood that a Mughal ruler would prefer to re-introduce its earlier Muslim name if he did actually establish a settlement, with a mint, at this port.

In the paper published in this *Journal*, Vol. XXI, (p. 146-170) the precarious hold the Mughals had on South India at the end of Aurangzeb's reign has been mentioned. In many instances when territory was annexed the Mughal commander undertaking the operation appointed administrators to control the areas. Working under these 'Subadars' or 'Nawabs', were minor officials known as 'Faujdars' or 'Qiladars' in charge of outlying areas. Almost without exception these local rulers were entrusted with the government and appeared to operate mints which issued coins, invariably following the pattern of Mughal coins and having the name of the reigning monarch incorporated in the inscriptions.

C. J. Brown, writing on the "Coins of Suris and Mughals" in his *Coins of India*, confirms the above. He states: "The great system of coinage illustrated by the Mughals, operating over such wide territories, needed, as has been already remarked, a master hand to control it. With the dissensions which set in between rival claimants to the empire

on the death of Aurangzeb, the controlling power was weakened. The diminished resources of his treasury compelled the emperor, Farrukhsiyar (A. D. 1713-19), to adopt the fatal policy of farming out the mints. This gave the *coup de grâce* to the system, and henceforth, as will be related in the next chapter we find independent, and semi-independent chiefs and states striking coins of their own, but always with the nominal consent of the Delhi emperor, and almost invariably in his name. Not until the nineteenth century was the Mughal style and superscription generally discarded."

We are also quoting below from an article entitled "The History of the Madras Coast, 1680-1690" by Jadunath Sarcar, published in *The Journal of Indian History*, Vol. III. The article, discussing about the Mughal conquests in the Eastern Karnatik, also describes the earliest administrative arrangements in the area and furnishes evidence of the government at particular centres from which the rupees, which are the subject matter of this paper, originated. It would appear that the authority responsible for their issue was the local commander, or administrator, in charge of a particular area within the jurisdiction of the 'Foujdar' of the Karnatik, popularly referred to as the Nawab of Arcot after the year A. H. 1110 (A. D. 1698), when Daud Khan Pani was appointed by the Supreme Mughal Commander, Zulfiquar Khan.

Mughal Penetration into the Eastern Karnatik, 1687

Golconda fell on the 17th September, 1687 and the Mughal penetration of the Karnatik plains was imminent. Even before the surrender of the Qutb Shahi king and his citadel, Aurangzeb had been sending out his officers to take possession of its provinces. After the conquest, Aurangzeb wisely retained the former Qutb Shahi Officers at their respective forts for some time.

Muhammad Ibrahim (created by him Mahabat Khan) was appointed Subadar of Haidarabad and the Khan's confidant, Muhammad Ali Beg (now entitled Ali Askar Khan) was nominated 'Faujdar' of the Karnatik, with Kadapa for his headquarters and subordinate 'Qiladars' and Magistrates under him, such as Fath Khan at Chinglepnt, Madana Ananta Pantulu at Conjeeveram and another Hindu at Punamalai. These officers submissively preclaimed Aurangzeb as their sovereign and planted the Mughal flag upon their forts. (October, 1687).

'The Governor of Punamalai said that as the world turned round like a wheel he had beaten his drums and fired

his guns, for the victory which the mighty Alamgir had gained over his old master.' (Orme's *Fragments*, 157)

The Mughal soon changed his mind and considered it unwise to have the newly conquered territory in the hands of the servants of the fallen dynasty. They were therefore replaced by Mughal officers. Ruhullah Khan got the Subedari of Haidarabad, Quasim Khan supplanted Ali Askar and was directed to march to the Karnatik and conduct a vigorous war against the Maratha forces there. (January 1688)

A small Mughal force reached Jinji country in the middle of November, 1687. (Madras Diary. 22nd Nov.)

On the 24th December (1687), Arcot was captured by the Marathas and its governor and most of his infantry killed.

On the 10th January (1688), Madana Ananta, the governor of that holy city (Conjeeveram) himself fled to Madras from the plundering Marathas.

On the 11th January (1688), the Marathas burst into Conjeeveram, but this occupation was short-lived.

The Mughal army arrived at Conjeeveram on the 25th February, 1688 and the Marathas evacuated the town at their approach. (Madras Diary. Z. S.; Orme is inaccurate; Keep. 260.)

Zulfiquar Khan, the Supreme Mughal Commander, finally succeeded at the beginning of August, 1690 in reaching Conjeeveram and the environs of Jinji at the beginning of September, 1690. The Maratha ruler and his family left the fort and went further south in the Karnatik, nearer his ally, the Rajah of Tanjore."

From the Madras District Gazetteers—"South Arcot", Vol. I, 1906, by W. Francis, we learn :

"The fort at Gingee was finally captured in January, 1698. Zulfiquar Khan found Gingee so unhealthy that in 1716 he transferred his seat of government to Arcot"

Daud Khan Pani was made Nawab of Arcot by Zulfiquar Khan in 1698. (*BNJ*, Vol. IX, 1913, "Dominions, Emblems & Coins of South Indian Dynasties" by Major R. P. Jackson)

In cataloguing the coins from the Southern mints of the Nawabs of the Karnatik, it is proposed to furnish particulars available concerning the centres, with any information connected with their establishment. The coins

for each mint will be listed separately, followed by information it has been possible to obtain about the mint in question.

Our two most recent sources of information on the coinage of the Mughals must be mentioned for their importance and help they afford to students interested in this period of Indian numismatics. The late H. Nelson Wright's *Catalogue of the Coins in the Indian Museum, Calcutta,* Volume III, and R. B. Whitehead's *Catalogue of the Coins in the Punjab Museum, Lahore,* Vol. II, are perhaps the finest examples of scholarly treatment of a difficult subject. Both works have been of considerable help while working on South Indian coins issued with, or without, the authority of the reigning Mughal in Delhi.

Some of the European Trading Companies were guilty of issuing coinage without competent sanction to facilitate trade at their settlements and these coins usually followed the Mughal pattern. This practice had existed from A. D. 1691, and even earlier, so far as the English East India Company was concerned.

With the conquest of Golconda and Bijapur by Aurangzeb Alamgir I in A. D. 1687, local rulers were appointed to administer the areas annexed and these rulers and their sub-ordinates issued coinage with the approval of the Mughal and in his name. The dies for these early coins came originally from Delhi, but later coinage was from dies locally manufactured. Some of these smaller mints appear to have issued rupees for only a few years, if we can judge by the number that have survived, but they have been included in one, or the other, of the two *Catalogues* mentioned as though issued by regular Mughal mints. This fact is mentioned not in criticism, but by way of explaining that with the lack of information regarding some of these rare specimens which occasionally found their way into collections in the North, or were reported on, or published, by collectors from the South, it had to be assumed they had been coined in southern mints established by Aurangzeb and his successors.

In this article, an attempt is made to show that these local rupees could not actually be Mughal coins. No attempt will be made to assign them to particular rulers, as in this unsettled period, local rulers were replaced all too frequently. The only alternative is to attribute them to the Nizams of the Deccan and the Nawabs of the Karnatik, or Arcot, or the rulers under them, who had been appointed by the Mughal to administer the newly annexed territory in South India.

As the first article dealt with rupees of the Madras Presidency only, no attempt has been made to discuss rupees from local mints in the Nizam's dominion, the enquiry being confined to the rupees issued by the Nawabs of the Karnatik and their subordinates.

Kurapa, Kadapa (Cuddapah)

(Situated about 130 miles north-west of Madras and 100 miles from the coast)

AURANGZEB ALAMGIR I. (A. H 1068-1118 (A. D. 1658-1707)
Æ. Rupee. Date A. H. (?), R.Y. 37, Weight 175.5 grains. Diameter : 0.92 inches.

Coin in the British Museum Collection **(Pl. XIV. 4)**. B.B. Whitehead obtained the coin at Pathankot in the Punjab.

R. P. Jackson, while discussing the South Indian Mints of the Mughal Emperors in his "Dominions, Emblems & Coins of South Indian Dynasties", (*BNJ*, Vol. IX, 1913), refers to a rupee of Cuddapah mint of Alamgir I issued in the 37th year of his reign. This would correspond with the year A. H. 1105 (A. D. 1693-94). It would appear that the coin referred to by Jackson is the one now in the British Museum.

The Mughal penetration into the Karnatik commenced with the fall of the Golconda king in the year 1687 and we know that Ali Askar Khan was nominated 'Faujdar' of the Karnatik with Cuddapah for his headquarters Ali Askar Khan was relieved by Qasim Khan shortly after he had been made 'Faujdar' and the rupee under reference may possibly have been issued by Qasim Khan in the name of Aurangzeb Alamgir I. There appear to be no records of other denominations from the mint at Cuddapah, at this period, and it is doubtful if the necessity did arise for more than what may be considered to be a token issue of rupees to mark the commencement of the Muslim administration in the area under the authority of the Nawabs of Arcot.

C. R. Singhal (*JNSI*, in his article "A unique Gold coin of the Nawabs of Cuddapah", Vol. XIV, pp. 113 and 114 and Pl. V, 12), refers to a gold coin, similar in size and general appearance, but not in weight, to a South Indian Pagoda issued, he suggests, by Abdul Alam Khan, Nawab of Cuddapah, about the year A. D. 1755. The coin is in the name of Alamgir II, the Mughal Emperor of Delhi, and is dated A. H. 1170 (A. D. 1756) and on the reverse has the mint name Sidhout, which is the headquarters of the

taluq of the same name in Cuddapah District. The weight of the coin is stated to be 43 grains.

While this note deals essentially with rupees from mints of the Nawabs of Arcot, it is considered of interest to refer to this pagoda-like coin which was issued by a local Nawab about 70 years after the area was annexed by the Mughals and a 'Foujdar' of the Karnatik, with Cuddapah as his headquarters, appointed.

With the transfer of the headquarters of the Nawabs to Gingee, and later to Arcot, certain governors under the Nawabs would have issued coins to meet local requirements when the necessity arose and avoided criticism by issuing them in the name of the Mughal in Delhi. This gold coin may have been issued for this purpose, or to mark some special occasion, and this may account for its rarity.

Kanji, Kinji (Canjeeveram)

(The Headquarters of a Taluq of the same name in the Chingleput District of the Madras Presidency.)

AURANGZEB ALAMGIR I. A. H. 1068-1118 (A. D. 1658-1707)

1. AR Rupee. Date. (?), R. Y. 30, Weight 178.0 grains, Diameter 0.88 inches; *Numismatic Supplement*, No. 251: "Some rare coins found in the Central Provinces" by M. A. Suboor.

The regnal year in the text is 32, but is seen to be 30 in the illustration (Pl. II, No. 5 in the *Supplement* referred to). The regnal year 30 would correspond with the year A. H. 1099 (A. D. 1687/88), when Aurangzeb invaded the Karnatik.

2. AR Rupee. Date A. H. 1106 (A.D. 1694/95), R. Y. 42, Weight 165.0 grains, Diameter 0.9 inches; Coin in the possession of P. Thorburn; the weight has not been checked and appears to be light.

3. AR Rupee. Date A. H. 1109 (A. D. 1697/98), R.Y. 4 (x), Weight 175.9 grains, Diameter 0.94 inches; *Numismatic Supplement*, No. xiv, No. 84: "Some Coins from the Limbdi Treasury". G. P. Taylor.

Taylor failed to read the name of the mint, but on referring to the Plate, No. XXXV, and seeing the coin in the British Museum collection it is clear that the name is Kanji. This coin originally belonged to Taylor and came to the British Museum through R. B. Whitehead. **(Pl. XIV. 5)**

The three coins referred to were probably issued by local rulers appointed by the Nawabs of the Karnatik. The first 'Qiladar' or Magistrate, at Kanji was Madana Ananta Pantulu, appointed in A. D. 1687. He should have been replaced by the Mughal 'Foujdar' Ali Mardan Khan, appointed in A. H. 1102 (A. D. 1690), (Scott. ed 1794, Vol. II, p 76). Scott also refers to Kanji, or Kinji, as a fortified position of some importance, which was the headquarters of a 'Foujdar' or 'Ta'aluqdar', in the 30th year of Aurangzeb's reign and that it was one of the seven chief worshipping places of the Hindus in India.

The 30th year of Aurangzeb's reign corresponds with the year A. H. 1099 (A. D. 1687/88) and the rupee with the R. Y. 30 should have been issued by the Hindu Madana Ananta Pantulu.

On referring to the extract from "The History of the Madras Coast, 1680-1690", furnished earlier in this note, we see that on the 10th January, 1688, Madana Ananta Pantulu, the governor of Conjeeveram, fled to Madras from the Marathas and the town was occupied by the latter the next day. The Mughal forces arrived at Canjeeveram on the 25th February, 1688. (Madras Diary. Z. S.) The Marathas evacuated the town on their approach. Madana Ananta Pantulu could either have been reinstated as governor in 1688, until the year 1690, or replaced by some other governor who would have carried on the administration until he, in turn, was replaced by Ali Mardan Khan in A.D. 1690. It is also possible the military commander administered the area.

Records exist which show that disorder and confusion continued in the area throughout 1689 and it was not until August, 1690 that Zulfiquar Khan and his forces again reached Conjeeveram and Ali Mardan Khan was appointed 'Foujdar'. (Dil. ii. 98. b. Madras Diary. 1 and 22. Sept. 1690).

Jinji (Gingee)

(Eighty miles south-west of Madras in the South Arcot District)

AURANGZEB ALAMGIR I. A. H. 1068-1118 (A. D. 1658-1707).

AR Rupee. Date A. H. 1109 (A. D. 1697/98), R. Y. 41, Weight 176·4 grains, Diameter 0·90 inches; *Numismatic Supplement*, No. XIV, No. 84 : "Some Coins from the Limbdi Treasury" by G.P. Taylor,

This coin originally belonged to Taylor and came to the British Museum Collection through R. B. Whitehead **(Pl. XIV. 6)**. It could have been issued by Kām Bakhsh, the Emperor's son, or by Zulfiquar Khan, the Supreme Commander of the Mughal forces, in 1698. After the capture of the fortress in January, 1698, Zulfiquar Khan appointed Daud Khan Pani, Nawab of Arcot, and it is also possible that either the Nawab, or his local governor, issued the rupee between January and July, 1698.

In this connection, it is interesting to refer to a note by Taylor, quoting from Grant Duff's *History of the Mahrattas*.

"In his *History of the Mahrattas*, Grant Duff tells at some length the story of the siege of Jinji. It appears that in A.D. 1693 the place was invested by the Mughal troops under the Prince Kām Bakhsh, but so languidly were operations conducted that not till January, 1698 was the fortress carried by escalade.

The Jinji rupee must have been issued from the mint but a few months after this success, for the year of its issue, A.H. 1109, closed on July 9th, 1698."

Mailapur (Mylapore)

(Situated on the left bank of the river Adyar and forms with San Thomé a southern suburb of the town of Madras)

AURANGZEB ALAMGIR I. A H. 1068-1118 (A.D. 1658-1707).

1. AR Rupee. Date (?), R. Y. 4(x), Mint Mailapur, Weight 177·0 grains, Diameter 0·90 inches; Coin in the possession of P. Thorburn. It should have been issued between A.H. 1108 and 1118 (A.D. 1696-1706).

2. AR Rupee. Date (?), R. Y. 4(x), Mint Mahilapur, Weight 174·9 grains, Diameter 0 90 inches.

3. AR Rupee. Date A.H. 1118 (A.D. 1706/7), R.Y. 50, Mint Mailapur, Weight 176·4 grains, Diameter 0 92 inches.

4. AR Rupee. Date A H. 1118 (A.D. 1706/7), R.Y. 50, Mint Mailapur, Weight 171·9 grains, Diameter 0·95 inches; coin is worn

The two rupees, items 2 and 3, are mentioned in *Numismatic Supplement*, No. XIV, No. 84: "Some Coins from the Limbdi Treasury" by G. P. Taylor.

Item 2 is similar to item 1 as regards the period of issue, but the mint is Mahilapur, which must be an earlier form of the name.

Coins Nos. 2 and 3 are illustrated **(Pl. XIV. 7 & 8)**

Coins Nos. 2, 3 and 4 were originally in Taylor's collection and came to the British Museum Collection through R. B. Whitehead.

5. Ꞧ Rupee. Date A. H. 1118 (A. D. 1706/7), R. Y. 51, Mailapur. The Weight and Diameter are not furnished. *Catalogue of Coins in the Punjab Museum, Lahore*, by R. B. Whitehead. Vol. II, p. 262, Coin No. 1938.

SHAH ALAM BAHADUR A. H. 1119–1124 (A. D. 1707–1712) .

1. Ꞧ Rupee. Date A. H. 1120 (A. D. 1708/9), R. Y. 2, Mint Mailapur, Weight 178 0 grains, Diameter 0.94 inches; *Numismatic Supplement*, No. XXXIX, No. 251: "Some rare coins found in the Central Provinces" by M. A. Suboor.

2. Ꞧ Rupee. Date A. H. 1120 (A. D. 1708/9), R. Y. 2, Mint Mailapur, Weight 175.8 grains, Diameter 0.95 inches.

3. Ꞧ Rupee. Date A. H. 1122 (A. D. 1710/11), R. Y. 4, Mint Mailapur, Weight 173.5 grains, Diameter 0.95 inches.

Coins 2 and 3 are in the British Museum Collection. They have not been illustrated in the plate accompanying this note. Detailed particulars have only been furnished for rupees from this mint. A mohur of Aurangzeb Alamgir I of this mint with the date A. H. 1117, R. Y. 50 has been published in *Numismatic Supplement*, No XLIII, No 301: "Rare Mughal Coins in My Cabinet" by Vicaji. D. B. Taraporevala. Another mohur of Shah Alam Bahadur, dated A. H. 1121, R. Y. 2, is in the British Museum Collection. In addition an half falus, or half paisa, of Aurangzeb Alamgir, without date, or regnal year, has been published in *Numismatic Supplement*, No. XLII, No 284: "Notes on a Few Rare Indian Coins" by P. Thorburn.

When discussing coins of Mailapur mint in an earlier account of the coinage of the East India Company, vide *JNSI*, XXI, it had been suggested that they must have been coined by the Company as most of the coins

known at the time had dates after 1705. It was also pointed out that the Company gained control of the area in 1705 and that a mint had probably been established by them about that date. Records exist which show the Nawabs had a mint at San Thomé and as San Thomé is adjacent to Mailapur, it is probable the name of the mint used on the coinage was Mailapur. It is also known that the mint at San Thomé was closed by the Nawab Dost Ali (A.D. 1733-1740).

As particulars have since been obtained of coins issued in the name of Aurangzeb Alamgir, with regnal years in the forties, vide items 1 and 2, it establishes the fact that the Nawabs had their own mint at Mailapur prior to the occupation of the area by the East India Company in 1705 and that the Nawabs continued to operate it until some date between the years A. D. 1733 and 1740.

For the reasons stated it has to be acknowledged that the coins of Mailapur mint are correctly those of the Nawabs and not of the Company.

Tiruvamur (Madras) : Arcot on the Coins

(A suburb of Madras, situated in the Chingleput District)

SHAH ALAM II. A. H. 1173–1221 (A. D. 1759-1806)

1. AR Rupee. Date (xxx)3, R. Y. 1 (x), Weight 174.2 grains, Diameter 0.90 inches.

The regnal year looks like 11 and there is a possibility that it could be read as 14. It must however be a coin of A. H. 1183 (A. D. 1769/70) and therefore of R. Y. 11.

The coin is in the British Museum Collection and is illustrated **(Pl. XIV. 9)**. The shape of the letters in the name of the mint is similar to what we see on the coins of the Nawabs and they do not resemble the East India Company's rupees, in this respect, as stated by Taraporevala.

2. AR Rupee. Date A.H. 1193 (A.D. 1779), R. Y. 19, Weight 175·0 grains, Diameter 0·90 inches; *Numismatic Supplement*, No. xliii, No. 301 : "Rare Mughal Coins in My Cabinet" by Vicaji. D. B. Taraporevala, Plate III, No. 6. The Writer does not refer to the unusual mint mark on the reverse of the coin. It is much clearer on this coin than on the specimen in the British Museum Collection which has a 'shroff' mark almost covering it. The mark is ψ.

Both coins were probably issued by Muhammad Ali (A.D. 1752-1795). The Nawab moved from Arcot to Madras on the 6th September, 1767, to a house acquired from his brother. (Love's *Vestiges of Old Madras*, Vol. II, p. 611). The mint mark is unlike the normal trident, or lotus, seen on the coins from the mint at Arcot.

The writer of "Rare Mughal Coins in My Cabinet", referred to above, is probably the first person to publish these rupees. He says in his note:

"The mint is certainly Arkat, being inscribed exactly as on the well known coins of Arkat of the East India Company. See, for example, *BMC*, 103, but it is different in having the name Shah Alam instead of Alamgir, as on the *BMC* coin, and in not having Shah Alam's couplet as in the Lucknow Museum Catalogue, coins Nos. 4519 and 4531."

It is suggested that these rupees are similar to the coins described by the Dewan of the Nawab in a letter to Sir Walter Elliot (*Coins of Southern India* by Sir Walter Elliot. Note on page 144), in which he states:

"The rupee struck at Tiruvamur did not bear the name of that mint, but that of Arcot, and the Hindu mint officers, to distinguish them, added to the die a mark like that on their foreheads, probably the triple 'nama' of the Sri Vaishnava sect."

Poonamali or Punamali

(Situated about 13 miles from Madras, in the Chingleput District)

AURANGZEB ALAMGIR I. A.H. 1068–1118 (A.D. 1658-1707)

AR Rupee. Date A. H. 1112 (A. D. 1700/1), R. Y. 44, Weight 177·0 grains, Diameter 0·85 inches; *Numismatic Supplement*, No. xliii, No. 306: "Some Rare Mughal Coins" by P. S. Tarapore, Plate iv, No. 6.

The author states in his note: "The style of the coin also resembles South Indian Coins of Aurangzeb"

Love, in his *Vestiges of Old Madras*, Vol. II, p. 312, refers to a record from the time of the Nawab Dost Ali (A.D 1733-1740), which states that the mints at San Thomé and Covelong were closed by the Nawab and that he permitted the transfer of the Pounamalai mint to Chintardipetta, where gold mohurs and Arcot rupees were struck.

The rare Poonamalai rupee must have been coined at the Nawab's mint, at this centre. It is possible the mint was under the control of his local "Qiladars" or magistrates, during the period C. 1700 to some year between 1733 and 1740.

On referring to the extract from "The History of the Madras Coast, 1680-1690", quoted earlier in this note, we see a Hindu was appointed, in the first instance, in 1687 at Punamali and it is possible he was replaced, shortly after, by a Mughal officer as Aurangzeb considered it unwise to have newly conquered territory in the hands of servants of a fallen dynasty.

It has not been possible to illustrate the rupee; a reference has however been given to the article in the *Numismatic Supplement* in which it is described and figured.

Islam Bandar (Cuddalore ?)

(The chief town of the taluq of the same name and the headquarters of the South Arcot District. It is situated on the coast about 127 miles south of Madras.)

AURANGZEB ALAMGIR I. A.H. 1068-1118 (A.D. 1658-1707)

A.R. Rupee. Date (?), R. Y. 4 (x), Weight 178·2 grains, Diameter 0·9 inches; *Numismatic Supplement*, xiv, No. 84: "Some Coins from the Limbdi Treasury" by G.P. Taylor.

In note 1 of his article, Taylor refers to a rupee of R. Y. 4(x) in his collection which baffled him. In a subsequent article, quoted earlier in the text, he furnished particulars which he considered established that Islam Bandar was a port on the West Coast of India. For the reasons stated by me at the end of this note, there would seem to be some doubt regarding this West Coast port actually being sufficiently important and I hope to furnish reasons for suggesting it may be Cuddalore, a port on the East Coast, when discussing this port and Porto Novo.

The rupee under reference is now in the British Museum Collection and came to the collection through R. B. Whitehead **(Pl. XIV. 10)**. The regnal year 4(x) determines the date of issue as lying between A. H. 1108 and 1118 (A. D. 1696-1706).

Probably issued by a local commander, or governor, under the Nawab of the Karnatik.

Mahmud Bandar (Porto Novo)

(Situated about 18 miles south of Cuddalore in the South Arcot District)

AURANGZEB ALAMGIR I. A. H. 1068-1118 (A. D. 1658-1707)

AR Rupee. Date A. H. 1119 (A. D. 1707/8), R. Y. 51, Weight 176.2 grains, Diameter 0.95 inches.

AR Rupee. Date A. H. 1119 (A. D. 1707/8), R. Y. 51, Weight 178.5 grains, Diameter 1.00 inches.

Numismatic Supplement, No. xiv, No. 84: "Some Coins from the Limbdi Treasury" by G. P. Taylor, Plate xxxv, Figs. 2 and 3.

Taylor, in his original article, was unable to decide where Mahmud Bandar was situated, but in a subsequent note did in fact show that it was Porto Novo.

Both coins are in the British Museum Collection and came to the collection through R. B. Whitehead. They are both illustrated **(Pl. XIV. 11 & 12)** to leave no doubt about the name of the mint being Mahmud Bandar. Taylor's identifications of Mahmud Bandar as Porto Novo is confirmed by a reference in "The History of the Madras Coast 1680-1690", page 65, by Jadunath Sarcar.

"The great Sivaji in his expedition of A. D. 1677-78 had conquered the Bijapuri Karnatik from the Palar to the Kolerun (Coleroon) river. Over this vast territory he placed Raghunath Narayan Hanumante as Viceroy, with Jinji for his seat of government and subordinate governors under him at Kunimedu (13 miles north of Pondicherry) and Mahmudi Bandar (Porto Novo)."

Another reference to the port by an almost similar name is found in an *Illustrated Guide to the South Indian Railway*, page 43, where it is stated that Porto was known by the names Parangipett and Muhammad Bunder.

Love's *Vestiges of Old Madras*, Vol. I, p. 517, has a further reference and in it both Cuddalore and Porto Novo are referred to by their Muhammadan names.

"In return for this and a further supply of ammunition, Zulfikar Khan sent the president a 'Cowle' confirming the existing grants for the fort and factory of Chinapatam, the factories of Masulipatam, Madapollam and Vizagapatam and the settlements and factories of Tevanapatam (Fort St. David), Islamabad (Cuddalore) and Mahmud Bandar (Porto Novo)."

Cuddalore and Porto Novo must both have been occupied by the Mughals at the time of their conquest of the Eastern Karnatik in the year A.D. 1687. There are indications that in the disturbed state of the country in the years 1688 and 1689, some towns changed hands and were occupied by the Marathas for short periods. Mention is made of an attempt, in 1688, by Ibrahim Khan Lodi, the son of Sher Khan, the late Bijapur Governor of Valikandapuram, to take Cuddalore from the Marathas, but, it is understood, nothing came of it. ("History of the Madras Coast, 1680-1690", p. 71).

The Mughal forces, however, once more occupied almost the whole of the Karnatik by the year 1690, Gingee being the only fortress which still had a Maratha force in occupation and offered resistance until January 1698, when it was captured by Zulfiqar Khan.

From Love's reference it is known that Cuddalore was called Islamabad at this time and the English East India Company had a fortress at the north of the river which was known as Tevanapatam (Fort St. David). On the opposite bank of the river was the old port with its collection of houses, warehouses and an old wharf at which small sailing ships could load and unload. This locality, which is some miles from the centre of the town, is known even to this day as Cuddalore Bandar, and was possibly referred to as Islambandar at the end of the 17th and early in the 18th centuries to distinguish it from the town of Islamabad and Tevanapatam (Fort St. David) situated on the opposite bank of the river. It is presumed the port Islambandar belonged to the Nawabs at this time. This assumption may not be correct and Islambandar may have been the Muhammadan name for some other port on this coast during the period of the Mughal occupation. Ports such as Negapatam, Nagore, or Masulipatam, which were originally known as Bandar are possible alternatives. The name Bandar is seen on the reverse of the falus and half falus in the name of Aurangzeb Alamgir of Masulipatam mint, together with its later name of Machlipatam.

R.B. Whitehead, in his *Catalogue of Coins in the Punjab Museum, Lahore*, Volume II, p. xl of the Introduction, refers to some uncertainty regarding the place designated by the name of Islamabad and points out that Chittagong was renamed Islamabad in A.H. 1076 (A. D. 1665) on the Mughal conquest of Arakan. He also mentions the same name was given to two captured forts in the Province of Aurangabad and that Mathura appears on the coins of Shah Alam II with its Muhammadan equivalent of Islamabad.

The three Islamabads, which are situated away from the coast, cannot be connected in any way with the Islambandar on the rupee under reference. Whitehead does suggest that Islamabad of Aurangzeb's currency' was Chittagong and this may explain the use of Islambandar for Cuddalore on coins which were issued in the period A. H. 1108-1118 (A. D. 1696-1707).

Sikakul, Srikakulam, or Chicacole

(A town on the coast of the modern Ganjam District, situated about four miles from the sea on the Nagavali River)

AHMAD SHAH BAHADUR. A. H. 1161-1167 (A. D. 1748-1754)

AR Rupee. Date A. H. 116(X) R. Y. 2. M. M. No. 58 (in Whitehead's Catalogue).

The coin under reference is illustrated and described in *The Catalogue of Coins in the Punjab Museum, Lahore*, Vol. II, by R. B. Whitehead; vide page 356 and Pl. xvi.

It has been published in *NS*, XV, and has again been referred to by R. P. Jackson in his paper "The Dominions, Emblems and Coins of the South Indian Dynasties", in the *BNJ*, Vol. IX, 1913.

Two other coins from this mint are known. They are both mohurs and are in the British Museum Collection and came to it from the collection of R. B. Whitehead.

SHAH ALAM BAHADUR A. H. 1119-1124 (A. D. 1707-1724).

AV Mohur. Date (?), R. Y. 4, Diameter 0.95 inches.

This should have been issued in A. H. 1123 (A. D. 1711).

FARRUKHSIYAR. A. H. 1124-1131 (A. D. 1713-1719).

AV Mohur. Date. A. H. 1124 (A. D. 1712), R. Y. 2, Diameter 0.95 inches.

Chicacole was an important port in the territory of the Golconda kings and a reference from Thevenot, part III, p. 105, is quoted from note 3 on page 124 of *A Geographical Account of Counties round the Bay of Bengal, 1669-1679* by Thomas Bowrey.

"From Bimlipatam to Cicacola, it is fifteen hours travelling by land, and this is the last town of the kingdom of Golconda, on the side of Bengala."

We are also told by Thomas Bowrey, vide page 124 of his book, quoted above, that Chicacole is the most famous town and port of the Golconda king and that it was the residence of Sr. Larskare (Sar-i-laskar, or Sarlashkar) the king's deputy or viceroy, and head of the forces.

In note 3, on page 124, we also have the remarks of Pringle, vide his note 55, p. 137, which reads :

"Checracoll (Srikakulam. pop : Chicacole), a town on the coast of the modern Ganjam District, situated about four miles from the sea on the Nagavali River, and at one time the headquarters of the 'Faujdar' of Golconda."

From these references we assume that Chicacole and the territory in the immediate vicinity was administered by a representative of the kings of Golconda before they were suppressed by Aurangzeb Alamgir in A. D. 1687. It may also be assumed that after the Mughal conquest, it was administered in like manner by a foujdar, or viceroy, of the Nawab of the Karnatik into whose territory the port would have been incorporated. Support for this suggestion is found in a quotation, note 3, pages 124 and 125, of Thomas Bowrey's *Geographical Account*, where he alludes to a reference made by Alexander Hamilton in his *A new Account of the East Indies* (1727), Volume I, page 371 :

"The Nabob, or Viceroy, of Chormondel, who resides at Chickacul, and who superintends that country for the Mughal......"

This remark almost certainly refers to the local ruler at Chicacole about the year 1727 when Hamilton wrote his account and he could only have been one of the Nawab's representatives at this date. It would therefore appear to be correct to assume that both the gold mohurs of A. D. 1711 and 1712 and the single rupee of the year A. H. 1162 (?) (A. D. 1748/49) and R. Y. 2 of Ahmad Shah Bahadur were coins issued by the Nawab's representative and that no Mughal's mint was in operation at this port at this late date.

S. H. Hodivala, in his paper on "The Gulkonda Rupees of Shah Jahan" in the *Numismatic Supplement*, No. XXVII, No. 168, refers to the undertaking given by the king of Golconda to Shah Jahan regarding the coinage of gold and silver in his territory. Hodivala also mentions the original dies should have come from Delhi, but that they must subsequently have been cut by South Indian craftsmen. It seems unlikely the Mughals would have established a mint at Golconda after Aurangzeb Alamgir conquered the territory

in A. D. 1687, when the arrangement made by Shah Jahan in A. H. 1045 (A. D. 1635) had operated satisfactorily from an earlier date.

In order to make this note more complete, the reference from Hodivala is quoted as it proves that Shah Jahan was not actually concerned in a mint of his own in Golconda territory and was content to let the king of Golconda operate his own with Shah Jahan's name on the coins.

"The red money and the white (gold and silver) will always be stamped with the auspicious coin-legend which has been engraved and sent to me from the Court which is the Asylum of the Universe." (*Bibliotheca Indica*, Text Vol. I, Part II, p. 178)

The 'Ahdnameh', or treaty itself is afterwards quoted and there also we find Shah Jahan saying about Qutb-ul-Mulk.

"And (Qutb-ul-Mulk) has promised that the faces of dirhams and the dinars (silver money and gold money) shall be adorned with our auspicious coin legend and that in all parts of his kingdom, the Kutba shall be read in, and money stamped with, our auspicious name." (*Bibliotheca Indica*, Text Vol. I, Part II, pp. 210-211)

Shah Jahan obtained both these concessions from Abdullah in A. H. 1045 and not A. H. 1067.

I must thank John Walker, Keeper of Coins and Medals at the British Museum, for permission to publish the coins which form the subject matter of this paper which are in the National Collection, as also for his help in the preparation of the casts of the coins referred to in the text and illustrated in the plate

TWO NOTES ON ASAF JAHI COINAGE

DINKAR RAO

[Pl. XIII.]

1. A Rare Quarter Anna

The Asaf Jahi Dynasty ruled over Hyderabad State from 1724 to 1948 A.D. The founder of the dynasty was Nawab Mir Qamruddin Ali Khan Asaf Jāh I, who was Subedar of the Deccan under the Moghul Emperors of Delhi. His successors, one after the other, were Nizam Ali Khan Asaf Jah II., Sikandar Jah Asaf Jah III., Nasiruddowlah Asaf Jah IV. and Afzal-ud-Dowlah Asaf Jah V. (who had attained certain degree of independence in their own regions), issued coins, in the names of their suzerain and contemporary Moghul Emperors, from Farkhunda-Buniyad (Hyderabad) Mint, with the initial letter of their names imprinted on them, which was their only distinguishing factor. After the Mutiny of 1857 and fall of Moghul Empire, Nawab Afzal-ud-Dowlah Asaf Jah V, began to strike coins independently with his dynastic name and title "Asaf Jah Nizam-ul-Mulk Bahadur" on them and added the initial letter of his name, 'ا' before the word 'Bahadur'. Thus, there are two types of coins of Asaf Jah V. Afterwards, his son, Nawab Mir Mahboob Ali Khan, Asaf Jah VI., continued this type of coinage with the initial letter of his name, 'م' in place of 'ا'. These were all hand-minted coins with denominations up to one anna in silver. R. G. Gyani had published some of them in the *Numismatic Supplement*.[1]

Later, his machine-made coins, known as 'Charkhi' type were introduced in gold, silver and copper. These were continued to be minted simultaneously with the previous hand-made coins till 1321 A.H. In 1322 A.H. his Charminar type of coins were put in circulation, which was copied by his successor, Nawab Mir Osman Ali Khan, Asaf Jah VII., last ruler of the Asaf Jahi Dynasty. While the former used the initial letter of his name 'م' on Charminar coins, the letter's initial used was 'ع'.

The copper coins of Charkhi type are scarce. P. S. Taraporewala had published three denominations of this type of copper, coins (half-anna, two pice and one pice) in this *Journal*[2] bearing dates 1312 and 1316 A.H.

1. XLVI (336), p. 99.
2. *JNSI.*, Vol. V, part 1, page 83-84.

I have a quarter anna coin of Charkhi type with the date 1301 H. clearly visible on it, the description of which is given below:

Metal: Copper; Shape: Round; Weight: 167 grs.; Size. 1·0″.

Legend

Obverse	*Reverse*
اصف جاه	۹۲
نظام الملک	ضرب
پاو آنه	فرخنده بنیاد
ســـــکه ۱۳۰۱	حیدرآباد

(Pl. XIII. 13)

It is evident from the date on this coin that it was minted in 1301 A. H. perhaps in imitation of the British India quarter-anna coins, which were then in vogue. While the quarter-anna of British India was equivalent to one pice (4 pice to an anna) and convenient for usage, this quarter anna of Hyderabad State, being of fractional value of 1½ pice (6 pice to an anna) might not have been considered convenient to the public at large, for lesser monetary transactions. Further, the quarter anna of British India weighed only 70 grs., whereas this quarter anna weighs 167 grs, about 2½ times more. It is, therefore, probable that this quarter anna coin, after being struck, was not finally approved, being uneconomical to Government on account of its heavier weight of copper and inconvenient to the public due to its fractional value. Perhaps, in view of this inconvenience, the idea of introducing quarter anna coins in the State was dropped for ever, as this denomination was never minted as long as the Hyderabad State Currency was a legel tender in the State.

According to P. S. Taraporewala, half-anna coins of this Charkhi type (of nearly the same weight as my quarter anna) were introduced in 1312 H. and were shortly afterwards withdrawn from circulation, since they were likely to be passed as silver coins by silver-plating them, as the dies for silver and copper coin were the same. In 1316 H. they were again put in circulation but were withdrawn soon, being unsafe. However, Charkhi type coins—rupees and its denominations in silver, were minted from 1312 to 1318 A.H. and they were in circulation till 1321 A.H. along with the previous hand-minted Chalni coins.

Considering all the above facts, this quarter-anna copper coin, dated 1301 A. H. is the earliest machine-made coin of the Asaf Jahi Dynasty, perhaps minted as an

experiment, during the reign of Nawab Mir Mehbub Ali Khan Asaf Jahi VI.

2. One Anna Silver Coin.

One anna silver coins were struck during the reign of Nawab Mir Mahbub Ali Khan Bahadur, Asaf Jah VI., who ruled over Hyderabad State from 1285 to 1329 H. These coins are hand-minted, tiny silver pieces, exact imitations of the one-anna silver coins of the Moghul Emperor Aurangazeb.

Three types of silver coins were struck during the reign of Asaf Jah VI.—firstly, chalani type (hand-minted), thereafter charkhi type (early machine-made) and lastly Charminar type. One anna coins in silver were of the chalani type only. This denomination in silver was not struck in the latter two types of machine-made coins.

I have this one-anna silver coin of Asaf Jah VI, dated 1300 H., in my collection. Its description is given below:

Metal: Silver; Shape: Round; Size: 0·3″; Weight: 9·5 Grs.

Obverse	*Reverse*
٩٢	مانوس
اصف جاه	میمنت
نظام الملک بهادر	جلوس فرخنده بنیاد
سنه ١٣٠٠ ء	حیدرآباد

(Pl. XIII. 14)

It is a beautiful tiny silver piece with clear legend and date 1300 H. readable on it. It is said that these small silver coins were struck, specially for the purpose of giving alms to beggars, on festive and ceremonials occasions by the ruler and nobility in those days and were seldom used for monetary transactions.

MISCELLANEA

1

COINS OF KING SĀTAVĀHANA

Publishing a coin of king Sātavāhana from the valuable cabinet of Hurmuz Kaus, V. V. Mirashi has suggested that the square potin coins number 5 and 6 of Rapson's *Catalogue*, which are taken as issued by a king of the name of Sātakarṇi, and the round potin coin No. 1 which shows the name Sāta may be taken as issued by Sātavāhana himself who was the originator of the house.[1] This suggestion has neither been supported nor controverted so far. In this note, I propose to examine it, as it has a great bearing on the history of the Sātavāhana house.

Mirashi describes his coin as follows :

Obverse : Elephant standing to r., with trunk upraised ; in front, a peculiar symbol consisting of two flattened circles on a vertical line ; above, triangle-headed standard with a cross-bar.

Reverse : Ujjain symbol, each orb of which contains a pellet within two circles ; in two upper corners outside this symbol, the same peculiar symbol as on obverse, and on the third side, a *Svastika* with ends turned in the reverse direction ; a partially cut *Nandipada* in upper l. corner.

This is a square copper coin. The legend on this coin is *Raṁño Siri-Sādavāhanasa* (for *Sātavāhanasa*) ; and from this we know that this king issued coins with the elephant on one and the Ujjain symbol on the other side. The same symbols we notice also on No. 7 of Rapson's *Catalogue* ; its metal and shape too are the same as of Mirashi's coin. The tree-in-railing and the other symbols which appear on this coin may be taken as additional features, not appearing on Mirashi's coin. This tends to show that this coin too may have borne out the name of Sātavāhana in the legend, which has disappeared leaving traces, the coin being worn.

Taking the case of coins number 5 and 6 of Rapson's *Catalogue*, we find on them the same characteristic features of the figure of an elephant and the Ujjain symbol, which, from

1. Above, VII, p. 3.

a study of all the known coins of the type, appear to be the necessary elements of the coins of king Sātavāhana, others like the *Svastika* or the triangle-headed standard, appearing as only additional accompaniments. Thus we may distinguish the two kinds of symbols appearing on this type of coins; they may be mentioned as follows :

Characteristic Features :

Obverse : Tree-in-railing ; on r., Ujjain symbol (simple or ornamental) ; double line border.

Reverse : Elephant, with trunk upraised, walking to r. or l. ; inscription ; double line border.

Accidental :

On obverse, crescent (above Ujjain symbol), *Nandipada*, rayed sun. On reverse, triangle-headed symbol, line of fishes and *Svastika* arranged alternately.

Studying all these coins together, we find that on No. 5 and 6 of Rapson's *Catalogue*, the crescent above the Ujjain symbol appears faintly and the rayed sun may be out of the flan on the former and so the *Nandipada* on the latter. As stated above, No. 7 is worn and the photograph shows traces of the same symbols as to be found on coins of this king. It, however, shows the elephant walking to right, as on Mirashi's coin, which shows the triangle-headed symbol not near the feet of the elephant but on its back and on which the *Nandipada* too has changed place ; instead of at the bottom, it appears on the top. The Ujjain symbol assumes an ornamental form, and the symbols in its angles may be taken to be additional. The tree on the left of the Ujjain symbol has either disappeared or was not intended. The elephant on this coin does not show the feet clearly and completely, and in the light of the facts before us, it may be taken as walking and not standing, as taken by Mirashi. The double line borders too may be taken as out of the flan on all sides, as on some sides on the coins of Rapson's *Catalogue*.

Thus all these four coins[1] appear to have been issued by the same ruler whose name was Sātavāhana, the potin coins showing the elephant to left and the copper ones showing the same to right, with minor variations, as noted above.

H. V. TRIVEDI

1. Cf. Rapson's *Catalogue*, No. 1, 5-6 & 7. On No. 7, the letter on the top-corner may have been *ta* or *da*, which is followed by a faint but complete *va*; and the letter between *va* and *na* appears to be *ha*.

2

SOME INTERESTING COPPER COINS FROM KAUŚĀMBĪ [Pl. X]

While examining the copper coins in the coin cabinet of the Allahabad Museum, I discovered some very interesting coins of Kauśāmbī. The Late Professor A. S. Altekar and other scholars have already published some rare coins from the aforesaid site in the past. I describe below a few new types:

1. A COUNTER-STRUCK COIN OF AGNIMITRA. **(Pl. X. 9)**
Bronze, round, diam. 0.8″, weight 7·062 grammes.

***Obverse*:** Counter-struck *Nandipada* inside a rectangular incuse. Below, legend (*gi ma ta sa*).

***Reverse*:** Bull standing to right before a mountain surmounted by *Triratna*. Ujjain symbol above bull.

Allan has published only two coins of Agnimitra[1] from Kauśāmbī. None of these is counter-struck in this manner on the obverse with legend below it. There is, however, one counter-struck coin* with *Triśūla* or *Nandipada* symbol below the bull on the reverse, which Allan incorrectly took as the obverse side of the coin.[2] Counter-struck coins of Agnimitra do not bear legend below this symbol. Therefore, the present coin is definitely a new one.

The symbols, tree-in-railing and *jaya dhvaja*, are absent in this coin though they are seen on the coins of Agnimitra published earlier.

2. INSCRIBED COIN OF BṚIHASPATIMITRA II. **(Pl. X. 10)**
Copper, oval, diam. 0.5″ or 0.6″, weight 1·990 grammes.

***Obverse*:** Tree-in-railing on the right. Ujjain symbol on the left. Below, legend (*Ba ha sa ta mi...*).

***Reverse*:** Bull standing to right. Ujjain symbol above haunch.

In the present specimen two points are worth observation. Firstly, it is small in size and thin in texture. Secondly, the symbol mountain, topped by a *Triratna*, which occurs on certain published coins of this ruler is not seen in the present specimen. It may be observed that no coins of thinner variety were in the knowledge of Allan. On the obverse side of this coin occur only the tree-in-railing and Ujjain symbols. Symbols like *jaya dhvaja*, *Triratna* and a wavy

1. *BMC*, pp. 153, Pl. XX, 5. and XXVIII, 15.
2. *BMC*, pp. 153, No. 34, Pl. XX, 5.

line are absent in this coin and so it is a new variety of coin issued by Bṛihaspatimitra II.

3. COINS OF JETHA MITRA. **(Pl. X. 11)**

(a) Copper, round, diam. 0.5″, weight 1·260 grammes.

Obverse : Legend *juṭhama* in the centre. Ujjain symbol on the left. Tree-in-railing on the right.

Reverse : Obliterated.

No coin of this size has been noticed previously and no published coin of Jetha Mitra also contains Ujjain symbol accompanied by a tree-in-railing on the same side.

(b) Larger variety **(Pl. X. 12)**

Copper, round, diam. 0.7″, weight 5·765 grammes.

Obverse : Above, legend *ṭhamata*. Below, *jaya dhvaja* in railing on the left. *Svastika* on the right with a dot below.

Reverse : Bull to left mounting a hill with raised tail.

So far no coins of Jetha Mitra having such symbols on the obverse have come to light.

Only three coins of the above ruler have been published by Allan[1] but they are different from the coins described above. Altekar has published one coin[2] of this ruler having V-topped banner and Ujjain symbol on the obverse and tree-in-railing on the reverse. Thus the coin described above is of a different type.

4. COIN WITH THE LEGEND *MAHARAJASA*. **(Pl. X. 13)**

Copper, round (irregular); diam. 0.7″, weight 2·647 grammes.

Obverse : Mountain on the left. Tree-in-railing on the right. Below, legend *maharajasa*.

Reverse : Bull to left at the top. Before him taurine symbol held by a human figure. Other symbols indistinct.

Three specimens, including one described above, are in the museum cabinet. The other two coins have a crude figure of bull on the reverse. These coins supply letter *ma*

1. *BMC*, pp. 154, Pl. XX, 7, 8 and 9.
2. *JNSI*, Vol. VIII, Part I, pp. 12, Pl. IA, 9.

which is missing in the above described specimen. No coins of Maharajasa or Madarajasa from Kauśāmbī have so far come to light. These coins belong to some new ruler of Kauśāmbī.

5. (UNIDENTIFIED COIN). **(Pl. X. 14)**

Bronze, rectangular, size 0.7″ × 0.5″, weight 5.740 grammes.

Obverse: Traces of legend (*Raja*) at the top. Indistinct-symbols in the centre. Below two letters (*Ayga* or *Āyu* ?). Highly corroded.

Reverse: Obliterated.

This coin may be attributed to some ruler named Rājā Ārya or Rāja Āyu. As the legend is fragmentary, its correct identity cannot be ascertained. Due to its unusual shape and grouping of letters of the legend, the coin may be accepted as a new type.

R. R. TRIPATHI

3

A NEW FIND OF SĀTAVĀHANA COINS
[Pl. XI.]

One of my students brought to me in April, 1960, a collection of eight Sātavāhana coins. It seems that they were found in a broken pot buried about four feet deep in the back yard of a hut in the village of Padugupadu, in the Nellore district, situated opposite Nellore on the other bank of the Pennar.

The coins are all of lead. The following is their description:

1. Pendant, 0.8″ diam. **(Pl. XI. 7)**

Obverse: Horse facing proper left with an object before and crescent above. (*ṇa*)*sa Rājño* (*Go*)*tami putasa si*(*ri*).

Reverse: Ujjain symbol with thick pellets in circles.

2. Round, 1″ diam.

Obverse: Lion facing proper left. Traces of *Satakaṇ*(*i*).

Reverse: Traces of chaitya of six arches within a double line square.

3. Oval, 0.8″ diam.

Obverse: Lion facing proper left. Faint of *kaṇa*.

Reverse: Ujjain symbol.

4. Pendant, 0.7″ diam.

   Obverse: Chaitya of three arches surmounted by crescent. Faint traces of letters.

   Reverse: Ujjain symbol of four thick pellets and a thin cross.

5. Round, 0.5″ diam.

   Obverse: Elephant facing proper left with head in two dots, thin legs and trunk hanging.

   Reverse: Ujjain symbol of four wide circles.

6. Round, 0.6″ diam.

   Obverse: Elephant facing proper left with stout body, thick legs, head in two thick dots and trunk hanging. *(ra)va.*

   Reverse: Part of Ujjain symbol of wide, thick and over-size circles.

7. Oval, 0.6″ diam.

   Obverse: Elephant with thin-body facing left.

   Reverse: Six circles instead of the usual Ujjain symbol.

Coin no. 1 above resembles two similar coins published by Rapson. (*BMC*, Pl. VI, Nos. 148 and G. P. 6). The legend on these two coins is more complete. There is no object before the animal on these coins while on the present coin there is a thick straight line with details worn out. All the Horse type coins included in the *BMC* represent the animal as standing on the ground, while on the present coin the horse seems to stand on a platform **(Pl. XI. 7)**. There are several coins of the Horse and Ujjain symbol type in the Government Museum, Madras. One of them (*Bulletin of the Madras Government Museum*–New Series, Vol. VII, nos 2 and 17) depicts the horse with a tree before it. The thick straight line before the animal found on the present coin may therefore be taken to be a tree.

Coin no. 2 is of the Lion and Chaitya type. Rapson has included in the *BMC* several coins of the Lion and Tree and Chaitya of six arches type. (*Cat.* pp. 10-12 and Pl. III, nos. 33, G.P. 2, G.P. 3, 36, 37, 38, 42 and 43). There are several coins of this type in the Madras Museum of which three have been described, by me (*Mus. Bull.* N. S. VII-2, p. 17, nos. 63-65). There are faint but fairly visible traces of the legend *Satakaṇ(i)* on the present coin. A coin of this type with the lion facing right and containing the legend *Rājño Siri Sataka-*

ṇisa has been obtained by me from Dharanikota, in the Guntur district and Gudivada, in the Krishna district and published previously (*JDHC*, II. 2, p. 85, nos. 37 and 38). I have ascribed these coins to Sātakarṇi IV. • The present coin may be ascribed to the same king.

The importance of this find of coin lies in the provenance. The coins cover the period from Sātakarṇi IV to Śrī Yajña. They indicate that the northern part of the present Nellore district was included in the Sātavāhana dominion during the latter half of the second century A. D.

M. RAMA RAO

4

THREE INTERESTING NĀGA COINS IN THE BARODA MUSEUM

The Baroda Museum possesses a small collection of 14 Nāga coins. Eleven of these are of the known varieties, e. g., wheel type coins of Devanāga, recumbent bull type coins of Gaṇapati Nāga and coins of Bṛihaspati Nāga with tiny figures of bull.

However, the remaining three coins are of peculiar interest by virtue of the figures on their reverse or their weight or fabric. Each of these three is therefore individually described in detail below.

First of these is an oval-shaped copper coin of Gaṇapati Nāga. The reverse shows a huge bulky bull standing to left. Only the hindmost part of the bull is visible. This type of heavy-bodied bull is not found on the coins of any Nāga ruler. The obverse shows the name of the ruler, the letters *Rājā Śrī Gaṇapa* only being visible. The letter *ṇa* has a strong resemblance with the letter *ṇa* on the Sātavāhana coins. The weight, size and fabric of this coin are also unusual. The coin is considerably thick in comparison to other Nāga coins, weighs 35 grains and measures $\frac{7''}{16}$ maximum and $\frac{11''}{32}$ minimum.

The second coin belongs to Bṛihaspati Nāga. It is a thin circular coin with a diameter of $\frac{11''}{32}$ and weighs 16 grains. The obverse gives the name of the king, the letters *Rājā Brahaspa* which are visible being quite sufficient for the identification of the ruler. The reverse contains a tiny recumbent bull in a dotted circle, facing right.

The third is a thin rectangular coin measuring $\frac{7''}{16} \times \frac{11''}{32}$ and weighing 16 grains. The letters *Mahārājā Śrī* on the obverse are clear but the following letters (probably four) are indistinct. However, the first of these four seems to be *Bha.* This, therefore, seems to be a coin of Bhava Nāga. The reverse contains a beautiful figure of an active trotting bull to left in a border of dots. This type of bull is not found on other coins of this ruler. Moreover, the bull is shown to the left in most coins of Bhava Nāga.

B. L. MANKAD

5

DISCOVERY OF A SECOND GOLD COIN OF GHAṬOTKACHAGUPTA

[Pl. IX.]

The earliest Ghaṭotkachagupta we know of was the son and successor of Śrī Gupta, the founder of the Gupta dynasty, but no coins of either the father or the son have yet been found. It has been conjectured that they were rulers of no importance, ruling over a small kingdom, and naturally did not think of introducing any coinage of their own.[1] But a coin, the obverse of which "bears traces of a marginal legend ending in *(gu)pta(ḥ)* and beneath the king's arm the name *Ghaṭo*,"[2] which was formerly in the White King Collection and is now in Leningrad, has long been considered as a unique coin of Ghaṭotkachagupta, obviously a later Gupta ruler. Altekar thought that this coin was "probably issued by Ghaṭotkachagupta, a grandson of Chandragupta II, who is known to have been ruling in Malwa as the viceroy of his father Kumāragupta I."[3] I have discovered a second gold coin of Ghaṭotkachagupta, which is now in my cabinet, and I am describing it here. It is, as will be apparent from the enlarged photograph, similar to the Leningrad coin, though not from the same die. The fabric and execution and the heavy weight definitely make it out to be a later Gupta coin.

Metal AV, size 0.9", weight 135.5 grs. **(Pl. IX. 6)**

Obverse: King, nimbate, standing to l., holding bow in l. and arrow in r. hand, garuḍa standard on l. between arrow and king. Legend,

1. Altekar, A. S., *Catalogue of the Gupta Gold Coins in the Bayana Hoard*, p. xl.
2. *BMC, Coins of the Gupta Dynasty &c.*, p. liv.
3. Altekar, *op. cit.*, p. xl, citing *Ep. Indica*, Vol. XVI, p. 115.

beneath l. arm, *Ghato*, can be clearly read, followed vertically by *ka* and ending *pta*, an illegible letter intervening. The circular legend is uncertain but *Sri Kramāditya* can be read on l.

Reverse: Goddess Lakshmī, nimbate, seated facing on lotus, holding lotus in l. hand akimbo on knee and *pāśa* in outstretched r. hand. Symbol on l. as in *BMC*, Pl. XXIV, 3 rev. Legend *Kramādityaḥ* is very clear on l.

AJIT GHOSH

6

A NEW CHAKRAVIKRAMA OF CHANDRAGUPTA II

[Pl. XI.]

Some time ago, I came across a new coin of *Chakravikrama* type of Chandragupta II. As only one example of this type from the Bayana hoard was known till now, we believed that it was a special issue and was minted in very small numbers to commemorate a special occasion of Chandragupta II's reign. This coin, I have recently examined, is exactly similar to the Bayana coin. It is with Panna Lal, a goldsmith of Shahganj, Jaunpur. It is said that two years back a Brahmin Upadhya found a hoard of hundred Gupta coins in his village Madan Kola while digging his field and this is one of them. This village is about 3½ miles to the south of Shahganj. The site where he is said to have found the coins is not promising from the archaeological point of view. The land is covered with a top layer of *kankar* and the exposed side does not show any trace of previous occupation.

The coin is described below: **(Pl. XI. 8)**

Gold, diam. 0.75", weight 115 grains, condition worn.

Obverse: God *Vishṇu* (or *Chakra Purusha*) standing to the right with an oval halo designated by three dotted lines round the upper part of his body. The deity has a crown on the head, a necklace (traces), bracelets and a dhoti. The ends of the *Kamarbanda* are shown flying to the right of the deity. He has a mace in his left hand and is seen offering something to the king designated by three balls. The king is standing to his left facing him and has a halo round his head designated by a thick line. He is wearing earrings, armlets, a tunic

and a dhoti folded round the legs. His right hand is extended towards the deity to receive some gift. His left hand is on the hilt of his sword. There is no legend on this side of the coin.

Reverse : *Lakshmi* is standing to the left within a halo very much like the deity on the obverse. Below her feet is the usual lotus, the left hand is holding a long stalk of lotus with a full blown flower and a bud. The right hand is bent and the fingers are pointing to something. A conch is below the right hand and a symbol is over the shoulder. The legend here is *Chakravikrama.*

The deity on the obverse of the coin has been described as *Chakra Purusha* by C. Sivaramamurti (*JNSI*, XIII, p. 180) and by V. S. Agrawala (*JNSI*, XVI, p. 97), and the king before the deity as Chandragupta II by Altekar (*Corpus of Gupta Coins*, p. 146).

The identification of the king as Chandragupta II on the basis of a comparison of the legend on this coin with those of others *Siṁha Vikrama* etc. leaves no doubt that the conclusion arrived at is correct. The question whether the deity is *Chakra Purusha* or *Vishṇu* is still open to doubt. It is said that "*Vishṇu* with two hands is unknown" (Altekar, *Corpus of Gupta Coins*, p. 147), but we have Mathura *Vishṇu* of the 5th century A. D. with two hands (H. Zimmer, *The Art of Indian Asia*, Vol. II, pl. 104) and the *Vishṇu Anantaśayana* with two hands on a terra-cotta plaque of 5th century A. D. from Bhitargaon (Codrington, *The Art of India and Pakistan*, pl. 29).

To depend entirely upon *Ahirbudhnya Saṁhitā* or the *Vishṇu Dharmottara Purāṇa* for definite conclusions in this respect is not very helpful inasmuch as no dated manuscript of these books belonging to the Gupta period are available, and then the descriptions of *Āyudha Purusha* are not very exact (Gopinath Rao, *Elements of Hindu Iconography*, Vol. I, part II, Appendix C, p. 78). The description of *Chakra Purusha* in *Ahirbudhnya Saṁhitā* is similarly incomplete (ch. 33). The *Sudarśana Purusha* in *Śilpa Ratna* has three eyes and locks of hair from which emanate flames of fire etc. (Gopinath Rao, Ibid., p. 79). Moreover the halo here is oblong and does not extend beyond the torso. As such, it should not be mistaken to represent the round *Chakra* with the deity of the weapon inside it as contemplated in *Ahirbudhnya Saṁhitā* (ch. 33). The *Chakra Purusha* seen on contemporary sculptures has a round *Chakra* towards the back of his head only and is represented along with

Vishṇu, e.g., on the plaque of *Vishṇu* from Rajgir illustrated by Sivaramamurti (*Ancient India*, no. 6, 1950, pl. XVII-A) or on the Harihara plaque on a square stone slab in the Allahabad Municipal Museum (Museum No. AC/2984). The wheels in both these cases are round and the spokes of the wheel are represented in the first case by lines and in the second by the petals of lotus flower. The halo behind the deity on the *Chakravikrama* coin is more like the halo of *Vishṇu* of Rajgir referred to above than that of *Chakra Purusha*.

The articles being given to the king appear to be three balls representing *Deva Loka*, *Mṛityu Loka* and *Nāga Loka*, and it can be presumed that it was in recognition by *Vishṇu* of Chandragupta's status as a *Chakravarti Rājā* that this coin was issued later in his reign.

R. G. CHANDRA

7

THE KING-AND-LAKSHMĪ OR QUEEN TYPE COIN OF SKANDAGUPTA

In the coinage of Skandagupta the variety described as the 'King and Lakshmī' type by Allan[1] and 'King and Queen' type by Smith is widely known. The controversy regarding its name is not yet finally settled and it is proposed to discuss the issue at some length here.

On the obverse of the coin there is *garuḍadhvaja* flanked by a male and a female facing each other. The male has been unanimously identified with Skandagupta, but opinions differ about the identity of the lady. She has been considered as Lakshmī by Allan on the ground of the lotus held by her in the left hand, and in support of this identification he quotes the poetic expression *Lakshmīssvayaṁ yaṁ varayāñchakāra* of the Bhitarī inscription. This view has also been accepted by Altekar, who further elucidates the point by calling the entire scene a representation of the idea of Jaya-Lakshmī making her appearance on the battle-field and offering the king some object indicative of sovereignty.[2] Smith, as already stated, thinks the lady to be the queen of Skandagupta on the analogy of the king-and-queen type of Chandragupta[3] and in one of the previous numbers of the present *Journal*,[4]

1. *BMC, GD*, pp. XCVIII-c.
2. *Corpus of Indian Coins*, Vol. IV (*Coinage of Gupta Empire*), p. 246.
3. *JASB*, Vol. LIII, pt. I, No. 2 (1884), p. 199.
4. *JNSI*, Vol. VIII, pp. 48 ff.

Prof. Jagannath has advanced arguments in favour of Smith's theory. Jagannath doubts Allan's view for the following reasons :

(1) There is no halo around the face of the lady, while on the reverse of the same type goddess Lakshmī has got a nimbus. (2) The repetition of the same goddess on both sides would not have appealed to the Gupta artist. (3) The lotus, which is described by Allan as the attribute of Lakshmī, is only a *līlā-kamala* (sportive lotus) associated with ladies in ancient India. The absence of devotional attitude in the male figure is also a factor, which makes the proposed identification doubtful.

We may add that the delineation of the lady is nearer to the conception of a mortal rather than that of a divine being. Had she been intended for Lakshmī, there would have been a divinity in her form as on the Chakravikrama type of Chandragupta II in the representation of Vishṇu.

But at the same time it is also difficult to accept the king-and-queen theory. Firstly, because the scene does not display any feeling of amorousness which is commonly perceptible in other Gupta coins depicting the monarch with his spouse. The king is standing aloof from the female with his head slightly bent, and in the posture of the so-called queen there is not a single indication of the usual submissive aspect of the Hindu wife. Secondly, as Altekar has pointed out,[1] the king in other Gupta coins of similar type is always on the right and the queen on the left and it is the former who is offering something to the latter. Thirdly, this theory does not explain the significance and sense of the *garuḍadhvaja* and upraised hand of the lady. Lastly, it can be asked as to why Skandagupta issued this type. The reason proposed by Jagannath that the queen would have played a significant role in subduing the enemies of her husband is not supported by any source of Skandagupta's history.

The female figure, therefore, can be neither Lakshmī nor the consort of Skandagupta. She is, most probably, the mother of Skandagupta. The coin perhaps represents the sight of the first meeting between the mother and the son after the death of Kumāragupta as related in Bhitari epigraph. The widowed queen is greeting Skandagupta, who has now conquered his enemies like Hūṇas and Pushyamitras and reinstated the *vichalita-kula-lakshmī* of the Gupta family, which has been indicated by the central position of the firmly set

1. *Corpus.*, pp. 245-6.

garuḍa-dhvaja. The young conqueror has been depicted as a warrior with bow and arrow, just returned from the battle-field, who out of reverence to his mother is bowing his head. His features and pose remind us of the following lines of Kālidāsa.

तस्याभवत्सूनुरुदारशीलः शिलः शिलापट्टविशालवक्षाः ।
जितारिपक्षोऽपि शिलीमुखैर्यः शालीनतामव्रजदीड्यमानः ॥

(*Raghuvaṁśa*, XVIII, 17)

In most of the specimens the right hand of the lady is in *abhaya-mudrā* denoting the act of conferring blessings (*āśīrvāda*) on Skandagupta, but in certain coins she is holding an object[1] which appears to resemble a *kamaṇḍalu* containing some kind of holy water. The widowhood of Kumāragupta's wife has been indicated by her unornamented *ekveṇī* coiffure unlike the previous representations of the *sabhartṛikā* Gupta queens.

After taking into account the above facts we are inclined to conclude that this type was plausibly the earliest issue of Skandagupta's reign struck to commemorate his first and greatest achievement and deserves to be named as Skanda and Rājamātā type.[2]

MUNISHCHANDRA JOSHI

8

KUMARKHAN HOARD OF GUPTA GOLD COINS

A small hoard of 9 Gupta gold coins was found in 1952 in the village Kumarkhan in Viramgaon Taluka of Ahmadabad

1. See the plate III, fig. 5, attached to Smith's paper in *JASB*, *op. cit.*
2. [This note was received during Professor Altekar's life time and he had made his editorial observations on it, which we are giving below :
"The nomenclature of this type neither as King-and-Queen type nor as King-and-Lakshmī type has as yet obtained a general acceptance and so Joshi's theory would be the third in the field. Joshi later wrote to me that the lady has not got any necklace on her neck ; what looks like that ornament may have been *Tulsi*-rosary so common with widows. He further argued that her right hand is in the *abhayamudrā* or *āśirvādamudrā*, so natural for a mother when meeting her son. But the main point to be considered is whether the attitude of Skandagupta shows that humility and reverence which a son would show to his mother when meeting her first after the sad bereavement. The mother may have been naturally glad at the phenomenal victories of her son, who was able to re-establish the fortunes of his family. Nevertheless, there would be a certain amount of inevitable sorrow on her face, when meeting the son for the first time after her widowhood. Do we see any trace of it ? The answer to both these questions is, I am afraid, in the negative. I, therefore, feel that this theory is not likely to be found to be correct."—*Editor.*]

district (Gujarat). C. R. Singhal examined these coins and published a note in this *Journal*.[1] According to him, it included 1 coin of Samudragupta (Battle-axe type), 2 coins of Kācha (Chakradhvaja type), and 6 coins of Chandragupta II (Archer type). A. S. Altekar appended a note to it as follows:

"The Guptas continued to hold Gujarat and Kathiawar down to the end of the reign of Skandagupta (c. 467 A. D.). It is therefore strange that this hoard should not have contained any coin of Kumārgupta I or Skandagupta. It may be that the hoard was buried before the accession of Kumāragupta I."

Recently, while I was preparing detailed catalogue of the gold coins in the Prince of Wales Museum, where eight of the nine coins are deposited (ninth is in the National Museum, Delhi), I found that one of the two coins, which Singhal had identified as the coins of Chandragupta II with the legend outside the string (Nos. 6 and 7), is really the coin of Kumāragupta with the legend *Kumāra*. Thus this hoard includes one coin of Kumāragupta I, and in view of this fact, the hoard was buried during the reign of Kumāragupta.

By way of further information, it may also be added that a pair of gold rings was also found along with these coins in the hoard, which is also deposited in the Prince of Wales Museum, Bombay.

P. L. GUPTA

9

THE GOLD CONTENT OF THE LATER IMPERIAL GUPTA COINS

The present paper is a continuation of my two earlier papers on the same subject.[2] Now we have examined 9 gold coins of the later Imperial Gupta kings from the Indian Museum, Calcutta. J. Allan and B. P. Sinha have also tested some of their coins from the British Museum, London.[3] A slight difference in weight can be noticed between the two sets of coins. But their coins are very inferior in style and execution to those of the earlier.[4]

From the point of view of pure gold content, we can classify them into five categories:

1.	Narasiṁhagupta	104·8
2.	Kumāragupta II	100·8

1. Vol. XV, p 185-196.
2. *JNSI*, XVIII, Pt II (1956); XX, Pt. II (1958).
3. *The Decline of the Kingdom of Magadha*, p 425.
4. Smith, *IMC*, I, i, p. 98.

3.	Uncertain, (Nara : reading doubtful)	95.0
4.	Vishṇu (probably Vishṇugupta)	92·4
5.	Kumāragupta (III ?)	77·1

It can be tentatively suggested that these coin-types were probably minted in the same order on the principle of Gresham's Law. From the present study of these gold coins, we can very well conjecture that there were two Kumāraguptas after the death of Skandagupta. Thus, the problem created by the Sarnath inscription, and the Bhitari and Nalanda seals of the Kumāraguptas seems to have been partly solved by this study.

Vishṇu is undoubtedly Vishṇugupta of the Imperial Gupta dynasty, for our findings correspond with that of Sinha.

One coin has been attributed to "The uncertain Nara" by V. A. Smith. He is generally identified with Narasiṁhagupta Bālāditya. From our present study, we also agree with V. A Smith, although the gold content is poorer than that of Narasiṁghagupta Bālāditya of *IMC*. The reason probably is that these coins were issued by him, when the country was very much affected by the Hūṇa menace.

TABLE

Laboratory report of the Later Imperial Gupta gold coins from the Indian Museum, Calcutta

Sl. No.	Name of the king	Coin-type	*IMC* No.	Specific gravity of the coins (Sp. gr. of pure gold = 19.32)	Percentage of pure gold
1	Narasiṁhagupta	Archer type	1	15.20	78.7
2	,,	,,	4	13.80	71 5
3	,,	,,	5	12.52	65.0
4	,,	,,	6	14.21	73.6
5	Uncertain (Nara : reading doubtful)	,,	1	12.35	64.0

Sl. No.	Name of the king	Coin-type	*IMC* No.	Specific gravity of the coins (Sp. gr. of pure gold = 19.32)	Percentage of pure gold
6	Kumāra-gupta II	Archer Type	1	15.00	70.50 Group A
7	,,	,,	2	9.83	50.9 Group B
8	Vishṇu (probably Vishṇu-gupta)	,,	1	11.52	59.7
9	,,	,,	2	12.29	63.6

Abstract of Table, showing pure gold content of the coins

Gr. No.	Name of the king	Coin-type	Average weight in air (grains)	Average percentage of pure gold	Average content of pure gold (grains)	Remarks
1	Narasiṁha-gupta	Archer type	144.57	72.48	104.8	
2	Uncertain (Nara : reading doubtful)	,,	148.2	64.00	95.0*	*Because it is a single coin.
3	Kumāra-gupta II	,,	147.0	70.50	100.1	Group A
4	Kumāra-gupta (III ?)	,,	151.4	50.90	77.1	Group B
5	Vishṇu (probably Vishṇu-gupta)	,,	149.45	61.65	92.4	

S. K. MAITY

10

THE GOLD CONTENT OF THE COINS OF ŚASĀṄKA

While Prabhākara Vardhana of Thāneśwar was trying to establish a big power in northern India, Śaśāṅka, the king of Gauḍa was rising in the East. His capital was at Karṇasuvarṇa in Murshidabad district. For about a quarter of a century (A.D. 603-619), he held sway over parts of Bengal, Bihar[1] and Orissa.[2]

Śaśāṅka has left behind him his splendid gold coins. Like those of the early Imperial Guptas, his coins contain a very good percentage of gold, suggesting the economic prosperity of his kingdom.

TABLE

Laboratory report of Śaśāṅka's gold coins from the Indian Museum, Calcutta

Sl. No.	Coin-type	IMC No.	Specific gravity of the coins (Sp. gr. of pure gold = 19.32)	Percentage of pure gold
1	Bull type	1	14.40	74.6
2	,,	2-3*		*have been exchanged.
3	,,	4	10.12	52.3
4	,,	5	14.12	73.4
5	,,	6	13.71	71.2
6	,,	7	13.40	69.5
6	,,	8	11.77	61.3

Abstract of Table, showing pure gold content of the coins

Gr. No.	Name of the king	Coin-type	Average weight in air (grains)	Average percentage of pure gold	Average content of pure gold (grains
1	Śaśāṅka	Bull type	139.2	67.0	93.2

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1. *JRASB (Letters)*, XI, p. 3. (Two Midnapur pls.).
2. The Doobi plates and *Si-yu-ki* (Watters, ii, p. 92); *History of Benga* (Majumdar), p. 60

11

THE GOLD CONTENT OF THE COINS OF THE TOMARA AND GĀHAḌAVĀLA DYNASTIES OF NORTHERN INDIA

The Tomaras are recognised as one of the 36 Rajput clans of India.[1] Their political supremacy centred round Delhi and Ajmer, and their settlement in Delhi had taken place at about ninth century A. D. They at first ruled under the Pratihāras; and at last they were defeated by the Chahamānas of Śākambharī.[2]

Cunningham[3] has given the names of the five kings of this dynasty as follows:

1. Sallakshaṇapāla-deva (c. A.D. 978-1009)
2. Ajayapāla-deva (c. A.D. 1003-19)
3. Kumārapāla-deva (c. A.D. 1019-49)
4. Anaṅgapāla-deva (c. A.D. 1049-79)
5. Mahīpāla-deva (c. AD. 1103-1128)

The above names were collected from their coin legends. They issued the "bull and horseman" or the "seated goddess" type of coins. This note is concerned only with some of the gold coins of Kumārapāla-deva. His coin-types are very much similar to those of Gāṅgeyadeva of the Kalachuri dynasty; and the coins are smaller than the standard Gupta gold coins. Like other mediæval Hindu coins, the Tomara coins are greatly alloyed with silver.[4]

The Gāhaḍavāla dynasty came to power in Kanauj at about the eleventh century A. D. Chandradeva or Chandrarāja was the first great king of this dynasty. He was succeeded by Madanachandra who ruled from about A. D. 1100 to 1104.[5] Madanachandra was succeeded by his son Govindachandra. A good number of inscriptions of the latter's reign have been discovered from the different parts of his empire. He ruled from A. D. 1114 to 1154, and his kingdom extended roughly to Banaras, Fatehpur, and Kanpur districts on the south, Kanauj on the west, Gonda and Gorakhpur districts on the north, and Dinapur in Patna district on the east. From his epigraphic records, we also know that he had struggled with the Pālas, Senas, Gaṅgas, Kākatīyas,

1. Ray, *Dynastic History*, p. 1145.
2. Ibid.
3. *CMI* (Cunningham), p. 85; *CCIM* (Smith), p. 259-60.
4. Vide my papers on the subject in *JNSI*.
5. Majumdar, *Struggle for Empire*, p. 51.

Chālukyas, Chandellas, Chaulukyas, the Muslims and the Karnāṭakas of Mithilā.[1] He issued gold and copper coins.

We have tested four gold coins of Govindachandra. They have very small percentage of gold and are mainly alloyed with silver. Some of them are so poor in gold content that we have to reject them for our present purpose. In style and execution, his coins also have very close similarity with those of Gāṅgeyadeva of the Kalachuri dynasty.

TABLE I

Laboratory report of the Tomara gold coins from the Indian Museum, Calcutta (of Ajmer and Delhi)

Sl. No.	Name of the king	Coin-type	*IMC* No.	Specific gravity of the coins	Percentage of pure gold	Remarks
1	Kumāra-pāla-deva (c.A.D.1019-1049)	Seated goddess type	1	16.25	83.4	(i) They are smaller than the standard Gupta gold coins.
2	,,	,,	2	15.00	77.6	(ii) They are mostly alloyed with silver.

Abstract of Table I, showing pure gold content of the coins

Gr. No.	King	Coin-type	Average weight in air (grains)	Average percentage of pure gold	Average content of pure gold (grains)
1	Kumāra-pāla	Seated goddess type	62.2	80.50	50.0

1. Ibid., p. 52.

TABLE II

Laboratory report of the Gāhaḍavāla gold coins from the Indian Museum, Calcutta

Sl. No.	Name of the king	Coin-type	*IMC* No.	Specific gravity of the coins	Percentage of pure gold
1	Govinda-chandra	Seated goddess type	1	10.50	54.5
2	"	"	2	11.80	61.5
3	"	"	3	13.68	70.9
4	"	"	4	11.72	60.8

Abstract of Table II, showing pure gold content of the coins

Gr. No.	King	Coin-type	Average weight in air (grains)	Average percentage of pure gold	Average content of pure gold (grains)
1	Govinda-chandra	Seated goddess type	61.4	62.00	38.0

S. K. MAITY

12

THE GOLD CONTENT OF THE COINS OF THE KALACHURI DYNASTIES OF CENTRAL INDIA

Our present purpose is to discuss some of the gold coins of the Kalachuris. Kalachuris, also known as Haihayas or Chedis, were an ancient Rajput race. Sometimes, they were referred to as the kings of Ḍāhala-maṇḍala. Their capital was at Tripuri, about six miles west of Jabalpur in Madhya Pradesh.[1] The earliest known king of this dynasty was Kokkalla I. At about eleventh century A.D., Gāṅgeyadeva and Lakshmīkarṇa considerably extended their power over central and northern India.

Among them, Gāṅgeyadeva issued some gold, silver and copper coins. The design and fabric of his coins are very

1. *EI*, I, p. 264 (Bilhari Ins.) ; II, p. 306 (Benaras Ins.) ; XIX, p. 78 (Amoda Ins.) ; Ray, *Dynastic History*, II, p. 738.

simple. The obverse is wholly covered with his own name, in characters not very much different from modern Nāgarī. On the reverse, a goddess (Pārvatī or Lakshmī) is seated cross-legged. His coins are found in all denominations, viz., one dramma, half dramma and quarter dramma.

No coins of the successors of Gāṅgeyadeva have been found so far. The reason perhaps is that Gāṅgeyadeva minted quite a good number of coins and they were further increased by some other coins accumulated by his able successor Lakshmīkarṇa from the countries he conquered. Thus, their successors probably did not need to issue new coins. It should, however, be noted here that a group of eight coins of Gāṅgeyadeva has been found in the village Isurpur, Tehsil Rehli of the Saugor district. They considerably differ in fabric from the old coins of Gāṅgeyadeva. They are thick and are half an inch in diameter. It has, therefore, been suggested that they were issued by Lakshmīkarṇa, the son and successor of Gāṅgeyadeva.[1]

A study of mediaeval Indian coins reveals that coin-type of Gāṅgeyadeva was immitated by the Chandellas and many other Hindu dynasties of northern and central India. As regards the gold content, his coins can be compared to those of the later Imperial Guptas.[2] They were greatly alloyed with silver. Some of them are so poor in gold content that we have to reject them for our present purpose.[3]

The Kalachuris of Tummāṇa also claimed descent from Kokkala I of the Tripuri branch. They ruled over the country of Dakshiṇa-Kośala from Tummāṇa as the capital.[4]

There were as many as twelve kings in this dynasty. Here, we are only concerned with the gold coins of Prithvideva (? II), Jajalladeva (? II), and Ratnadeva (? III). They ruled from A. D. 1141 to A. D. 1182. In fabric and design, these coins have very close similarity with those of Gāṅgeyadeva. But they contain very poor percentage of gold and are heavily alloyed with silver.

1. *JNSI*, III (1911), p. 26.

2. My papers on the similar subject in *JNSI*,

3. Smith, *IMC*-I, Part III.

4. Ray, *Dynast. History*, II, p. 802.

TABLE I

Laboratory report of the gold coins of the Kalachuris of Ḍāhala (Tripuri) from the Indian Museum, Calcutta

Sl. No.	Name of the king	Coin-type	IMC No.	Specific gravity of the coins (Sp. gr. of pure gold = 19.32)	Percentage of pure gold
1	Gāṅgeyadeva Vikramāditya (c. A. D. 1030-1041)	Seated goddess type	1	14.48	75 0
2	,,	,,	2	16.52	85.6
3	,,	,,	3	15.00	77.9
4	,,	,,	4	17.50	90.65

Abstract of Table I, showing pure gold content of the coins

Gr. No.	King	Coin-type	Average weight in air (grains)	Average percentage of pure gold	Average content of pure gold (grains)
1	Gāṅgeyadeva Vikramāditya	Seated goddess type	49.6	82.41	41.0

TABLE II

Laboratory report of the gold coins of the Kalachuris of Tummāṇa from the Indian Museum, Calcutta

Sl. No.	Name of the king	Coin-type	IMC No.	Specific gravity of the coins	Percentage of pure gold
1	Prithvideva (? II)	Rampant lion type	1	16.95	88.0
2	,,	,,	5	18.70	97.0
3	Jajalladeva (? II)	,,	1	14.15	73.5
4	,,	,,	2	15.15	78.6
5	,, ,,	,,	3	16.10	83.5
6	,,	,,	4	12.90	67.0
7	Ratnadeva (? III)	,,	1	15.35	84.8

Vigharaha[1] instead of *Śrī Vopparāja* The legend on Ojha's coin was *Śrī Voppa,* reverse consisting of cow facing right, whereas on Burn's coin the cow was facing left (cf. *JNSI*, XX, pt. I, pl. figs. 14, 16, 17).

These gold coins being almost similar, A. S. Altekar (*Proc. All India Oriental Conference,* held at Baroda in 1933, pp. 703-5) attributed them to Bāppā Rāwal of Mewar. But this attribution presents some difficulties because Mewar, in those days, had altogether a different currency[2] and the Guhila rulers of Mewar never adopted the device of cow suckling a calf[3] on the reverse of their coins. Still more, they never issued gold coins because Mewar was not a very big empire during that period. Therefore, it is not plausible to identify Voppa or Vopparāja of these gold coins with Bāppā Rāwal of Mewar or any other ruler of the neighbouring region. It is worth taking note of that gold coins of Vatsadāman, described by Rapson (*JRAS*, London, 1900, pp. 123 ff) and Allan (*Num. Chronicle,* 5th Series, XVII, 1937, p. 99) have also the figure of a cow suckling a calf on the reverse. V. V. Mirashi has suggested the identification of Vatsadāman with the famous ruler of the Śūrasena dynasty. He is said to have held his sway over the region of Kaman and Bayana (*Indian Historical Quarterly,* Calcutta, XVIII, p. 71). It is just possible that Vappa or Voppa, of the gold coins under study, was the same as *Vappuka* (वप्पुक) of Śūrasena[4] dynasty and mentioned in the Bayana Inscription of V. S. 1012 (*Ep. Indica,* XXII, pp. 120ff.).

Another gold coin of the aforesaid variety (i e, cow giving a suck to calf on the reverse) was published and illustrated by Ajit Ghose in the *Numismatic Chronicle,* 5th Series, XIII, 1933, pp. 139-42, plate on p. 139. The name of the ruler, on the obverse,[5] was read as *Śrī Kasava,* i.e., *Śrī Keśava,* whose exact identification with any of the known rulers of the Śūrasena dynasty of Bharatpur region is of course not possible at the present moment. It is therefore essential to make a thorough search and study of

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1. Wrongly read as *Śrī Dhairyarāja* in *Proc. A. S. B.*, Calcutta, 1881, p. 39.
2. R. L. Samar, *JNSI*, XX, pt. I, 1958, pp. 26 ff. has published these interesting coins of Mewar.
3. Consult Nepalese coins for this device ; cf. A. Cunningham, *Coins of Anc. India*, pl. XIII ; D. W. Mac Dowall, *JNSI*, XXI, pt. I, 1959, pp. 39 ff. The legend *Kamadihi* on the reverse of these coins proves that the cow here represented *Kāmadhenu* or celestial cow gratifying every wish.
4. Cf. also *Ind. Ant.*, X, pp. 34 ff. ; *Ep. Ind.*, XXIV, pp. 329 ff. for the early inscriptions from Bharatpur region.
5. On the reverse of this coin, the cow faces left whereas the calf invariably faces right on the coins of Voppa and Keśava.

the numismatic finds from Bharatpur region. It is of course a plausible suggestion, as also put forth by R. L. Samar,[1] that the Guhilas of Mewar had nothing to do with this type of currency wherein the reverse motif consisted of a cow suckling a calf.

It may also be remembered that a few 7-8th century stone-reliefs from the regions of Mathura and Bharatpur also present a cow suckling a calf in the right half and Krishṇa lifting the Govardhana mountain in the remaining half (cf. C. Sivaramamurti, *JASB*, Letters, Calcutta, XXI, 1955, pl. XVIII, fig. 37). It is of course not possible to hazard any view regarding the association of Krishṇa cult (i e., *Govardhana-dhāraṇa Līlā*) and the reverse coin device (cow suckling the calf) in this particular region. Future discoveries are therefore eagerly awaited to say something definite in the above reference.

R. C. AGRAWALA

17

A SILVER TAṆKÁH OF ILTUTMISH

H. Nelson Wright, at page 70 of his *Coinage and Metrology of the Sultans of Delhi* published in 1936, writes that "the Silver Taṇkáh of Iltutmish is seldom obtainable, inspite of the apparently large number of varieties catalogued." Most of these varieties are treasured in the coin cabinets of foreign museums. The *JNSI* also has not noticed any of these varieties in the quarter of a century that has followed the publication of H. N. Wright's Corpus of coins of the Sultans of Delhi.

Luckily I recently happened to acquire one Silver taṇkáh of Iltutmish at Sonepat, near Delhi. It is described hereunder :

Metal : Silver ; Size : 1.1″ ; Wt. : 167 grains ;
Mint : Delhi دهلی

Obverse : In a double square within a circle the top line of the square being single Kalima in two lines followed by

المستنصر بالله

امیر المومنین

In top segment دهلی

In the margin ....والذی......... ; the rest somewhat blurred.

1. *JNSI*, XX, pt. I, 1958, p. 31.

Reverse : In a double square in a circle. Scroll work in segments.

السلطان الاعظم

شمس الدنيا و الدين

ابو المظفر التتمش

السلطان

In top segment it reads like دهلي but not clear. In the margin ....سنه شهور في......... ; the rest somewhat blurred.

The Coin is similar to 50F of Nelson Wright's *Catalogue* (p. 19).

UTTAM SINGH RAO

18

A RARE COPPER COIN OF QUTUBSHAHI DYNASTY [Pl. XIII]

On the decline of the Bahamani kingdom, Qutubshahi dynasty came into existence, with its capital at Golconda. The founder of this dynasty was Qutub-ul-Mulk, who hailed from Iran and entered service of the Bahamani Sultans. By his valour and loyal services, he gradually rose to the position of the Governor of Telangana region of the Bahamani kingdom.

During the prolonged weak reign of Sultan Mahmood Shah Bahamani, anarchy spread everywhere in the kingdom due to lack of proper control by the Sultan and frequent change of ministers. Jealousy, malice and rivalry prevailed among the courtiers and the regional governors of the kingdom. Consequently, the five regional governors (Adilshah, Nizamshah, Imadshah, Qutubshah and Baridshah) began to rule independently in their respective regions. In this way, Qutub-ul-Mulk became independent ruler of this Telangana region in 918 A. H and established his capital at Golconda.

The following were the eight kings of Qutubshahi dynasty, who ruled from 918 A. H. to 1098 A. H.

1.	Qutub-ul-Mulk (Qutubshah)	918- 950	A.H.
2.	Jamshed Qutubshah,	950- 957	A.H.
3.	Subhan Qutubshah	957	A.H.
4.	Ibrahim Qutubshah	958- 988	A.H.
5.	Mohammad Quli Qutubshah	988-1020	A.H.
6.	Mohammad Qutubshah	1020-1035	A.H.

7. Abdullah Qutubshah 1035-1083 A.H.
8. Abul Hasan Tanashah 1083-1098 A.H.

In 1098 A.H., their rule came to an end, when the Mughal emperor, Aurangazeb, conquered and annexed their territory to his empire.

The kings of Qutubshahi dynasty were Shiyas by sect, although some of them showed their leaning towards Sunnism also. The fifth Sultan, Mohammad Quli Qutubshah, a staunch and zealous Shiya, constructed an Ashurkhana in Hyderabad in 1004 A. H. and established therein Panjas (an emblem of the Palm of the Right Hand), the five fingers of which are said to represent 'PANJ-Tane-Pak' (the five holy souls of Islam, viz, Mohammad, Ali, Fatima, Hasan and Husain), in their honour and commemoration. The Panjas and Ashurkhana exist today in the heart of Hyderabad City, an object of great reverence by the Muslim community, specially of Shiya sect.

I have, in my collection, a copper coin, the obverse of which clearly displays this emblem of Panja (the Palm of the right hand), a facsimile of the Panjas[1] in the Ashurkhana of Hyderabad, established during the regime of Sultan Mahammad Quli Qutubshah. Even though the legend on the reverse of this coin is disfigured by punch-strokes, still *Quli Qutubshah* can be read on it.

The description of the coin is given below :

Metal : Copper Weight : 56 Grs.

Shape : Round and Thin Size : 0.7″

Legend :	***Obverse***	***Reverse***
	The symbol of the palm of the right hand.	

(Pl. XIII. 8)

No proper name of the issuer of the coin is found in the legend on its reverse but only the title *Quli Qutubshah*. The symbol of Panja (human hand) on the obverse of this coin may tend to suggest that probably this type of coin was

1. The Shiyas adopted the palm of the right hand as their emblem, taking it to be the hand of the commander of the faithful (امیرالمومنین), the fourth orthodox Khalifa. They profess it to be the hand of Allah (God), according to the Quranic verse 10 of Surah 48 : *Yalullahi Fanga Aydihim.*

issued by Mohammad Quli Qutubshah, in memory of his installation of Panjas in the Ashurkhana.

However, this is a rare, unique and interesting relic of the Qutubshahi dynasty.

DINKAR RAO

19

A RARE COPPER COIN OF BARIDSHAHI DYNASTY OF BIDAR

[Pl. XIII]

The Barid Shahi kings were the successors to a part of the Bahamani kingdom, after its downfall, with their capital at Bidar.

The decline of the Bahamani kingdom of the Deccan, set in towards the latter part of the long and weak reign of Sultan Mahmood Shah Bahmani, when some of his regional governors (feudatories) broke the political unity by assuming independence in the provinces under their control. Although his four successors, viz., Allauddin, Ahmad Shah, Wali-ullah and Kalimullah, factually ascended the throne of the Bahamani kingdom, one after the other; they were mere puppet kings and the kingdom was actually ruled by their Wazirs (ministers) When the last Bahamani king, Sultan Kalimullah fled from his capital Bidar in about 933 A. H. and never returned, the scions of the Barid Shahi dynasty, who were then acting as Wazirs in the capital, succeeded to the kingdom.

The successor Barid Shahi kings did not assume royalty, at first, being afraid of the other feudatories (Adil Shahi and Nizam Shahi) who were more powerful and commanded bigger regions. They carried on the administration of the relics of the Bahamani kingdom, probably as Wazirs, in the absence of the last Bahamani king, Sultan Kalimullah (who is said to have ended his life in despair after his flight from the capital) in order to avoid opposition from the other powerful feudatories. They did not strike coins in their own names (a sign of assumption of royalty) but continued to mint coins in the name of the Sultan Kalimullah for a long period. since some such posthumous coins bearing the date 940, 942, 950 and 959 A. H. have been discovered. It was the fourth king of Barid Shahi dynasty, viz., Ibrahim Barid, who is said to have

assumed royal title "Sultan" and began to strike coins independently with his dynastic name on them, probably from 993 A. H. (as no coins of any previous date, bearing their dynastic name, have been traced so far) after the other powerful feudatories had done so.

Three different sizes of Barid Shahi coins, some of them bearing the date 933 H. were published earlier by Hormuz Kaus of Hyderabad, in this *Journal.*[1] Another Barid Shahi coin, bearing the date 1018 A. H. and belonging to the reign of the last king Amir Barid, was published by me in this *Journal.*[2] Then an exhaustive paper on Barid Shahi coins appeared in this *Journal*[3] by Abdul Hameed of Hyderabad, who is a scholar of the Muslim coins of the Deccan. The coins of different kings of this dynasty are known only from the dates found on them.

I have recently come across a new and interesting coin of Barid Shahi dynasty, on one side of it, the name of the last Bahamani king Kalimullah appears with date 993 A. H and on the other side, the dynastic name of Barid Shahi kings with the prefix 'Sultan'.

The description of the coin is given below below :

Metal : Copper ; Weight : 66 Grs. ; Shape : Round ; Size : 0.5″.

Obverse	*Reverse*
دلیم اللہ	سلطان
۹۹۳	امیو برید[شاہ]

(Pl. XIII. 12)

The date 993 A. H. clearly visible on this coin shows that it was evidently struck during the region of the fourth king Ibrahim Barid, who ruled from 987 to 994 A. H. The royal title "Sultan" does not go with the name of Kalimullah on the obverse but accompanies the dynastic name of Barid Shah on the reverse which is noteworthy. On all types of Kalimullah's coins (inclusive of his aforesaid posthumous coins) the royal prefix 'Sultan' accompanies his name invariably. Thus, there is no scope for suspecting this coin as a mule. The separation or absence of the royal title, "Sultan" with the name of Bahamani king Kalimullah on the obverse and in addition, the dynastic name of Barid Shah on the reverse go to suggest that probably in 993 A. H.

1. *J N S I*, VII, p. 51.
2. Ibid., XX, p. 230.
3. Ibid., XXI, p. 58.

Ibrahim Barid assumed royalty in his kingdom, after his powerful contemporaries had done so earlier in their own regions and the before the change-over of the coinage (from the posthumous coins of Kalimullah to the independent coinage of Barid Shahi dynasty), this coin might have been struck earlier in 993 A. H. as an experiment, retaining the name of Kalimullah on one side and adding the royal title, 'Sultan' to his dynastic name, 'Amir Barid Shah'. After its successful circulation, for some months without opposition from any quarter, his known and published coins (without the name of Kalimullah) might have been struck during the latter part of the same year 993 H. and put in circulation. The same type was continued afterwards till the extinction of the Barid Shahi dynasty, with change in dates, by which the coins of different kings of this dynasty, are identified in the absence of their proper names on them.

Thus, this is a rare and important coin of Barid Shahi dynasty of Bidar, belonging to the reign of Sultan Ibrahim Barid, not known and published so far.

DINKAR RAO

20

COINS OF MĀNĀJIRĀO GAEKWAR

[Pl. XII]

From an agreement, preserved in Baroda State records, it appears that Baroda rulers were striking coins as early as 1768.[1] It is not unlikely that soon after Rakshasabhawan battle in 1763, coinage might have been issued by Dāmājirāo from Nasik, Chandore or Talegon. But the coins of Baroda, that are known today, are not in any case earlier that 1803.

The earliest coins are those of Ānanda Rāo (A. D. 1800-1819). All his silver coins and those of his successors have the name of the Mughal Emperor Akbar II and bear initial letter of the ruler's name, viz. आ for Ānanda Rāo, सा for Sayāji Rāo and so on.[2] But the copper coins of Ānanda Rāo, published by R. G. Gyani, bear the name of Mughal emperor Shah Alam II,[3] who was a contemporary of Ānand Rāo Gaekwar during the first six years of the latter's reign (A. D. 1800-1805).

1. *Baroda State Records*, Ex. 7.
2. *Numismatic Supplement*, XVIII, p. 229-248.
3. Ibid., XLII, 27-28.

This gives us a clear indication that the coins, that would have been struck between the years A. D. 1763 and 1805, i. e. during the reign of Emperor Shah Alam II, should have the name of this emperor.

Recently, while classifying the coins of Baroda Museum, I came across eight silver coins of the Baroda series **(Pl. XII. 1-8).** On their obverse is the name of the Mughal Emperor Shah Alam II. *Shah Ghāzī* or part there of, appears on most of the coins; but on one coin we have the word *Bādshāh* also. The letters *Shāh Ā* can be seen truncated on three coins and on one, the lower part of *Ā (la) m* survives. Traces of the word *mubārak* can also be seen in the lower part of these coins. So, the obverse legend on these coins can confidently be restored as (*Sikkā*) *mubārak Bādshāh Ghāzī Shāh Ālam.*

On the reverse is the usual formula *Mānus mimnat julus sanh* with the word *zarb* in the last line. The mint name is out of flan. A dagger pointed upward is placed in the loop of the letter س of the word جلوس (*julus*) and to the right of the word جلوس is the letter मा. On one coin, it appears in its full form and on others it is partly punched; while on one it is completely off the flan. Seven of the coins have a numerical figure 4. The eighth coin has no trace of any numeral. This numeral evidently denotes the regnal year.

It is quite clear that these coins were issued prior to A.D. 1806 in the reign of Shah Alam II. The only ruler of Baroda during this period with the name having initial letter मा was Mānāji Rāo, whose dates are A. D. 1789-93. These coins may well be attributed to him.

The study of the regnal years on the coins of Ānanda Rāo and his successors, shows that they were reckoned as the the regnal years of the Mughal Emperor Akbar II all through and even after his death for some time. On the same analogy, it might at first sight appear that the regnal years on the present coins might be the regnal years of the contemporary Mughal Emperor Shah Alam II.

But it is not so. The fourth regnal year of Shah Alam II (i.e. 1762-63) falls within the reign of Dāmājirāo Gaekwar, to whom these coins certainly do not belong. The regnal year therefore on these coins refers to the ruling Gaekwar and not to the contemporary Mughal Emperor. The fourth regnal year of Mānājirāo falls during A. D. 1792-93. It is interesting to note that during these years some of the grievances of Mānājirāo were redressed and some of his rights were recognised

by the East India Company.[4] It is therefore quite probable that these coins were minted in his name on this occasion.

Lastly, four of these coins are rupee and weigh approximately 180 grains and are 0.75″ in size; the other four are half-rupee and weigh about 90 grains and are 0.62″ in size.

B. L. MANKAD

21

SILVER COINS OF THE RESTORED HINDU RAJAS OF MYSORE ON THE DEATH OF TIPU SULTAN—NEW MINT TOWN

[Pl. XV]

Since writing the second note on coins of Krishna Raja from a mint at Nagar (*JNSI*, Vol. XXI. Pt. I, p. 81), another rupee from this mint has been seen by me and is in the possession P. Thorburn of London.

It is illustrated **(Pl. XV. 1)** with the permission of the owner and has the regnal year 46 and the mint name can be read. It furnishes one more year in which the mint at Nagar was in operation and coined silver.

C.H. BIDDULPH

22

COINS OF TIPU SULTAN OF MYSORE ISSUED IN THE KARNATIK IN 1780-1790

[Pl. XV]

A small copper coin **(Pl. XV. 2)** was recently obtained from P. Thorburn of London, by whom it was thought to have been issued by the Nawabs of the Karnatik, or Arcot, in the year A. H. 1202 (A. D. 1787). The coin may be described as under:

A. E.; Weight 29.1 grs.; Diameter 0.44 inches.

Obverse : An eight petalled flower, or lotus.

4. Genso and Banaji, *The Gaikwads of Baroda*, Vol. III, 171-182

***Reverse*:** An inscription in Urdu reading :
San. 1202. Zarab Karnadk.

The word Zarab is off the flan in my coin, but Thorburn has another coin in which the inscription is complete.

When considering the circumstances under which it may have become necessary for the Nawabs to issue a coin with a mint name in such general terms, and not with reference to a particular town, another coin with an identical inscription on the reverse was noted and it is thought that this has afforded an explanation. In an article in the *British Numismatic Journal*, Vol. V, 1909, "Coin Collecting in Mysore" by Major R. P. Jackson, two 10 cash, or half paisas, of Tipu Sultan, are described and illustrated under Miscellaneous Coins, Nos. 483 and 484. One of the coins with an elephant to the right on the obverse and the reverse with an inscription which is identical to that on the coin now published is illustrated by Jackson, vide Plate II, No. 484. Jackson was not able to read the inscription and suggested, vide page 45 of the reprint of his article, it may be Be-Nazir (Hole Honnur), or Nazarbar.. He mentioned he had several of these coins.

In order to explain the necessity for the issue of these two coins, and perhaps others which may come to light as a result of this note, a reference was made to the *Madras District Gazetteer for South Arcot*, Volume I, by W. Francis, Madras, 1906, under "Nawabs of the Carnatic, or Nawabs of Arcot."

Haidar Ali is recorded as having invaded South Arcot in 1780 and to have driven the English back into Madras. His son, Tipu Sultan, with the assistance of the French, captured Cuddalore in 1782, the year his father Haidar Ali died. In 1785, Cuddalore was restored to the English and in like manner Pondicherry to the French.

In 1790, war broke out between the English and Tipu Sultan. He was pursued by the English and passed from Trichinopoly, capturing Tiruvannamalai and a few other places and then hurried away to Mysore.

Haidar Ali and Tipu Sultan occupied the Karnatik for brief periods from 1780 to 1790. As both coins are dated A.H. 1202 (A.D. 1782), it may be assumed they were issued by Tipu Sultan in that year, after the Mysore forces occupied Cuddalore, as Tipu Sultan captured it in 1782 and held it to the year 1785.

C. H. BIDDULPH

23

COPPER COINS ISSUED BY THE ENGLISH DURING AN OCCUPATION OF KANDAHAR

[Pl. XV]

Four small copper coins issued by the English in Kandahar form the subject matter of this note and as the coins differ, each one is described and illustrated.

1. A. E., Weight 74·5 grs.

Obverse: A crown with an encircling wreath which is open at the top.

Reverse: An inscription in Urdu reading: Zarab Kandahar 1293 or 1295.

(Pl. XV. 3)

This coin is in the writer's possession and is roughly rectangular in shape, with two sides pressed out slightly, due to the blow when it was hand-struck.

The date looks like ١٢٩٣ (A. H. 1293—A. D. 1876) and appears in the same manner on coin 2, which is in the British Museum collection. It is not usual to see Arabic figures joined and the possibility is that the last figure, which has been read as three, may in fact be a badly formed five touching the figure nine. If it is actually intended to be A. H. 1293 (A. D. 1876), the coin would have been struck two years before the need for it had arisen as the second Afghan War was covered by the years 1878-1880. P. Thorburn of London has a similar coin which is dated A H. 1297 (A. D. 1880).

The flan of coin No. 1 consists of three thicknesses of metal which can be seen at both cut ends and has been formed by folding a thin copper strip three times and beating, or compressing it. This peculiarity is not seen in the British Museum rectangular specimen, coin No. 2 of this note and may be due to the metal strip being heated to a higher temperature before folding and compressing.

2. A. E., Rectangular, Weight 65·4 grs.

Obverse and **Reverse**: Similar to No. 1. Dated A. H. 1293 (?) **(Pl. XV. 4)**

3. A. E., Circular, Weight 72·3 grs.

Obverse and ***Reverse*** : Similar to the other coins. Date not visible. **(Pl. XV. 5)**

4. A. E., Circular, Weight 72·4 grs.

Obverse and ***Reverse*** : Similar to No. 3. Date not visible. **(Pl. XV. 6)**

Coins, Nos. 2, 3, and 4, are in the British Museum collection. These have been catalogued and illustrated in *History of the Coinage of the Territories of the East India Company in the Indian Peninsula*, by Edgar Thurston, 1890, and included under Bombay on page 110, coin No. 32, and figured on Plate XVI, No. 7.

It is not easy to explain the reason for its inclusion under coins of Bombay by Thurston and it is doubtful if the coin was ever minted at Bombay as an emergency issue for the forces engaged in the second Afghan war which occurred in the years 1878 to 1880. At this date, it is unlikely that hand-minted coins were being issued from either Bombay or Calcutta mints.

From the appearance of the first two coins, Nos. 1 and 2, it will be seen, they resemble coins issued by the Persians when they occupied Kandahar. These coins are usually roughly square, or rectangular, in shape, the flan thickness being made up of three or four thicknesses of copper plate, by folding thin strips, before cutting the blank flans from the folded strips.

It seems reasonable to suggest, coins 3 and 4, which are struck on circular flans, are later than Nos. 1 and 2. No dates are visible on both these coins.

Currency was very scarce when the English forces occupied Kandahar as the Afghans removed all the available coins in circulation before evacuating the town. In this emergency, it is presumed that the English put the Afghan hand-operated mint at Kandahar into production to supply coins of small denomination in copper. It is on record that rupees, and it is presumed that coins of smaller denomination in silver, were arranged from the mint at Bombay.

Hand minting continued in Afghanistan until 1890 when a mint on English lines, capable of turning out 40,000 silver coins a day, was established at Kabul in 1890-91.

C. H. BIDDULPH

24

COINS OF THE DUTCH EAST INDIA COMPANY STRUCK IN THE UNITED PROVINCES OF HOLLAND - COPPER DOITS 1726-1794. DORDRECHT MINT IN THE STATE OF HOLLAND

[Pl. XV]

Doits and half doits were struck in considerable quantities for the Company in the various provincial mints of Holland, Westfrisia, Zeeland, Utrecht, and Gelderland. They were current on the Coromandel Coast, in Cochin, Ceylon and Malacca.

A counter-marked doit of the provincial mint of Holland dated 1735 or 1736 is illustrated, **(Pl. XV. 7)**, as it is the first Dutch Colonial coin with a counter-mark that has come into my possession. Many thousands of doits have been collected and examined with a view to making as complete a collection as possible of the coins which circulated in India and Ceylon.

It is not known if this counter-marked doit is from India, Ceylon, or from further east. It is quite possible, there are others in existence and it is hoped this note may prompt further information from readers who may be in a position to explain the necessity for the counter-mark.

The Dutch counter-marked coins of various countries which were current in Ceylon when they occupied the Island. They even used a counter mark, or hall mark, on their own "Surat" rupees of Colombo and Tuticorin mint of the years 1787, 1788 and 1789, vide *The Coins of the Dutch Overseas Territories, 1601–1948* by Scholten, pp. 148 and 149.

The Ceylon authorities at the time of the English occupation also counter-marked rupees and quarter rupees of the East India Company imported into Ceylon, with a crown, during a shortage of silver currency. (See *Ceylon Coins and Currency* by Codrington, p. 165 and Plate VI, Nos. 166 and 167).

Scholten, in his book, referred above mentions doits with counter-marks purchased in Jaffna and illustrates one of the coins on Plate XVI, No. 1257. His note (1) on page 147 reads :

"We are informed by Mr. G. A. Van Borssun Buisman, of Wassenaar (Holland), that at Jaffna, during a recent trip

through Ceylon, he bought for his collection a number of different copper doits with the bale-mark of the Company and a counter stamp in the shape of a star ornament, on some on the obverse, on others on the reverse. The purpose and origin of the stamp are unknown to us."

Again, on page 125, Scholten, when referring to the coinage of Borneo, states :

"In October of the year 1812, the country of Maluka on the Island of Borneo was ceded by a resolution of the Sultan to the English adventurer Alexander Hare. When the Dutch Government resumed power, Hare was compelled to leave this independent small state."

"On the doits of Maluka, there is very often a counter-stamp; eight spokes of a wheel (believed to represent the Union Jack); sometimes this counter-stamp is smaller."

The counter-mark on the coin illustrated with this note can not be said to resemble a Union Jack as it is more like a Maltese or St. Andrews Cross, and can not be the one described on the doits of either Jaffna or Maluka. The counter-mark may possibly have been applied to doits in some restricted area of Ceylon by the English, or some other private authority.

C. H. BIDDULPH

25

COINS OF THE DUTCH EAST INDIA COMPANY, COPPER DOITS AND HALF DOITS 1726 – 1794 FROM DORDRECHT MINT IN THE STATE OF HOLLAND

[Pl. XV]

The two coins illustrated here, **(Pl. XV. 8 & 9)** are interesting brockages from Dordrecht mint. They are the first brockages seen of these Dutch Colonial coins in the many thousands collected by me. Their rarity would seem to point to careful inspection after striking at the five mints which produced doits and half doits for use on the Coromandel Coast, Cochin, Ceylon and Malacca, or to the efficient machines used.

The same can not be said of defective coins, mostly badly centered, or double struck, which occur fairly commonly and of which a few from some of the mints will be described and illustrated in another note.

C. H. BIDDULPH

26

COIN-WEIGHTS OF THE EAST INDIA COMPANY

[Pl. XV]

Since publishing a note in Vol. XXI, Pt. II of this *Journal*, two other coin-weights have been secured by me and will be described and illustrated in this note to make the information on these coin-weights as complete as possible.

It is hoped that if there are others which have not been included, they may be described and illustrated in this *Journal* so that the information regarding these coin-weights may be still more complete.

1. ***Obverse:*** One Tola. 180 grs.

Reverse: One Tola in three regional languages.

This weight is countermarked on the obverse with the letters M. C. and F. **(Pl. XV. 11)**

2. ***Obverse:*** Minimum legal weight of oblique milled old Farukhabad Rupee. 171.198 grs.

Reverse: Blank.

The inscription is within an hexagonal double lined frame.

A small oval counter-mark with an indistinct monogram is placed below the particulars of the weight of the Rupee. **(Pl. XV. 10)**

Another coin-weight for an oblique milled old Farukhabad Rupee was published in the first note and is illustrated on Plate IX, No. 1. The weight in that instance was 172.35 grs.

From a recent publication, *British Commonwealth Coinage*, by W. A. Linecar, 1959, Chapter I, India, pages 46 and 47, we read :

"Concerning Furruckabad (or Ferrukabad) Mint, M. F. Pridmore sends the following note" :

"Ferrukabad Rupee was also called the Lucknow Rupee ; its weight was 173 grains and its fineness 95.5 silver, 4.5 alloy. They were also struck at other mints."

"In 1813 it was ordered that the Delhi Mint be restricted to coining Ferrukabad, or Lucknow Rupees. The Delhi Mint ceased striking in 1818. In 1817 the right of minting the Ferrukabad Rupee, hitherto confined to Delhi, was extended to Calcutta and Benares and to any other mint of the East India Company."

"When the Benares Rupee was abolished in 1819 the the Ferrukabad Rupee took its place, and was legal tender in all districts under the Bengal Government except Bengal, Behar and Orissa. The weight was increased to 180.234 grains. It was to assist in the recoinage necessitated by this change that the Sagur Mint (Central Provinces) was equipped with modern machinery in 1824, but the Ferrukabad Rupee struck at Sagur weighed 180 grains, fineness 165 silver, alloy 15. Benares struck Ferrukabad Rupees at 180.234 grains."

From the extract quoted above, it is evident, the weight of the Ferrukabad Rupee varied within certain limits from the different mints from which it was issued and it is possible an "Old Far. Rupee" may have been issued, which weighed 171.198 grains, from Delhi, Calcutta, or some other East India Company mint and that the coin-weight under reference would have been intended for checking its weight.

There is also a possibility that the lighter coin-weight may have been issued some time after the heavier one to permit rupees that had been in circulation and lost more than the accepted amount of metal to continue in circulation for a further period.

An interesting point that should be mentioned when considering these coin-weights is that although the minimum legal weights are recorded on them, they are invariably lighter than the weights recorded. This may have been intentional, allowing for some recognised permissible loss due to wear while in circulation. These variations, however, are not constant and may also be owing to loss in weight of the coin-weight due to wear. The actual differences found by weighing them are furnished in the form of a tabulated statement.

Weights recorded in the Original Note in Vol. XXI, Pt. 2

	Weight recorded	Actual weight	Difference
1. Old Calcutta Rupee	179.0 grs.	178.8 grs.	0.2 grs.
2. Old Farukhabad	172.35 ,,	171.0 ,,	1.35 ,,
3. New Stand: Farukhabad	178.12 ,,	177.9 ,,	0.22 ,,
4. Company's Rupee	176.4 ,,	175.6 ,,	0.8 ,,
5. Half Tola	90.0 ,,	86.5 ,,	3.5 ,,

Weights included in this Note

	Weight recorded	Actual weight	Difference
6. Old Far. Rupee	171.198 grs.	168.9 grs.	2.3 grs.
7. One Tola	180.0 ,,	179.0 ,,	1.0 ,,

C. H. BIDDULPH

27

DUKRĀ, DUKĀNĪ AND FAḌIYĀ

I have read with the greatest interest the articles of S. C. Upadhyaya, R. C. Agrawal, P. L. Gupta and C. R. Singhal published in this *Journal*.[1] My own contribution to the subject is of a very modest nature. But it may be of some use.

I began my educational career at Churu (former Bikaner State, Rajasthan) in the first decade of this century by studying the *Mahājanī* system of Arithmetic and Accounts; and I still remember the tables of *Dukrās*, *Dukānīs*, and *Fadiyās* which we had to memorise.[2] One Rupee could, according to these, be exchanged either for 100 *Dukrās*, or 40 *Dukānīs*, or 20 *Fadiyās*. Thus one *Dukrā* equalled the present *nayā paisā*. A *Fadiyā* was in value the same as the present 5 *nayā paisā* piece. The *Dukānī* was, we might say, a ½ *Fadiyā* coin. Its value was the same as that of an Akbarī *dām*; and it is not unlikely that the ratio 2 : 1 between a *dām* and a *Fadiyā* might have led in some quarters to the belief that the *Fadiyā* equalled a two-anna piece.

By the time I began my studies, *anna* had become the standard coin. So my tables started with *anna* as the common basis of their computation; and I give them below in the form I learnt them. But it is obvious that during the period of the currency of *Dukrās*, *Dukānīs* and *Fadiyās*, India had a decimal system of coinage. We are now reverting to a system we have already used.

TABLES

Anna		*Fadiyā*		*Dukānī*		*Dukrā*
1	=	1¼	=	2½	=	6¼
2	=	2½	=	5	=	12½
3	=	3¾	=	7½	=	18¾
4	=	5	=	10	=	25
5	=	6¼	=	12½	=	31¼
6	=	7½	=	15	=	37½
7	=	8¾	=	17½	=	43¾
8	=	10	=	20	=	50
9	=	11¼	=	22½	=	56¼
10	=	12½	=	25	=	62½
11	=	13¾	=	27½	=	68¾

1. XVIII, p 114 ; XIX, p. 81 ; XIX, p. 89 ; XXI, p. 192.
2. I have checked up the tables by referring the matter to an old friend of mine from Churu.

12	=	15	=	30	=	75			
13	=	$16\frac{1}{4}$	=	$32\frac{1}{2}$	=	$81\frac{1}{4}$			
14	=	$17\frac{1}{2}$	=	35	=	$87\frac{1}{2}$			
15	=	$18\frac{3}{4}$	=	$37\frac{1}{2}$	=	$93\frac{3}{4}$			
16	=	20	=	40	=	100	=	Rupee	1

DASHARATHA SHARMA

28

THE PROBLEM OF PARITY BETWEEN OLD AND NEW SMALL-COINAGE IN FREE INDIA

The problem has left the stage of daily press for they last many years. It is, therefore, desirable to discuss it now academically.

The old rupee (O. R.) of the British times, before the new coinage came into circulation, was of 64 old pice (O. P.). The new rupee (N. R.) of free India, with new coinage, is of 100 naye paise N. P.).

Arithmetical calculation -

1 N. R. = 1 O. R

$\therefore$ 100 N. P. = 64 O. P.

$\therefore \sqrt{10^2}$ N. P. = $\sqrt{8^2}$ O. P.

$\therefore$ 10 N. P. = 8 O. P.

$\therefore$ 1 N. P. = .8 O. P.............I

Again $\therefore$ 8 O. P. = 10 N. P.

$\therefore$ 1 O. P. = 1.25 N. P.........II

If the calculation is correct, as it is so by the simple principles of arithmetic, the parity tables should have been on the basis of these two calculations. As we know, there are discrepancies. For example 1 O. P. = 2 N. P.

To my mind, the mistake in deciding the official parity tables was the elimination of the principle of squares. I try to explain this view in the following manner.

1 O. P. = 1.25 N. P.

$\therefore 1^2$ O. P. = $(1.25)^2$ N. P.

$\therefore 1^2 \times 32$ O. P. = $(1.25)^2 \times 32$ N. P.

= 50 N. P i. e. $32 \times 1 \times 1$ O. P.

= $32 \times 1\frac{1}{4} = 40 \times 1\frac{1}{4} = 50$ N. P.

$\therefore$ 32 O. P. = 1.5625 × 32 = 50 N. P.

or to give another example,

1 anna = 1^2 × 4 O. P. = $(1{\cdot}25)^2$ × 4 N. P.

$\therefore$ 4 O. P. = 1.5625 × 4 = 6·25 N. P.

$\therefore$ 4 × 1 × 1 O. P. = 4 × $1\frac{9}{16}$ = 5 × $1\frac{1}{4}$ = $6\frac{1}{4}$ = 6.25 N. P.

In short, while the square of 1 remains 1, the square of 1.25 is 1.5625. When half a rupee is considered equal to 50 N. P., I have a feeling that the calculation given above is lost sight of, and the more simple process of dividing 100 into two equal parts, because two equal halves make one, is resorted to.

I think it is worth while and just to take note of this principle in the calculation of areas, and, no less important, in the calculation of volumes in fixing monetary parities between fractions of area and volumes on the one side and of rupees on the other.

The old rupee was able to meet with the requirements of the linear, square and cubical calculations. For, 64 is equal to 8^2 as well 4^3. The new rupee can make money-area calculations as easy as would do the old rupee. For cubical calculations, the new rupee creates difficulties. Hence there is a necessity for a standard coin which would be a multiple of the present standard rupee. It is easy to think of a ten-rupee standard coin. Alternatively, the merits of a New Standard Rupee equal to old five rupees, three annas and four pies may also be considered. I do not propose to develop the topic in this Paper. I only suggest as a deducution from the discussion given above that the standard coin should be one as would meet with the necessity and requirements of easy calculations in cubes. Alternatively, more disparity in money-cube parity tables would follow.

S. S. DAVE

NOTES AND NEWS

I

Rupees issued by the English and French East India Companies and the Nawabs of Arcot in the 17th to 19th Centuries. (Vol. xxi, Part II, pp. 146-173)

Addenda and Corrigenda

Additional information obtained since writing the original article, vide Vol. xxi Part 2 of the *Journal*, is incorporated in this note as it helps in a better understanding of the subject and clears certain doubts and inaccuracies.

An extract from a recent publication which would seem to support the view that the Company had no mint at Arcot is furnished, as also a further reference from Love's *Vestiges of Old Madras*, which shows that in the years 1743 and 1744 "Arcot" rupees were in fact coined at Madras.

An attempt has also been made to identify "Old Pondicherry" and "Pondicherry" rupees which have been mentioned by the Diwan of the Nawabs to Sir Walter Elliot. (vide. *Numismata Orientalia*—"*Coins of Southern India*". p 144.)

It may be suggested that in actual fact there may not have been any visible difference in these rupees and that the names may have resulted from some variation in either the weight, or the silver content. While this is so, I think the weight of evidence is in favour of a suggestion that some recognisable feature had made it necessary to refer to them by different names.

Page 147, para 3.

For 'Tavarnier' read 'Tavernier'.

Page 147, para 6.

The last sentence of this paragraph would be better if after Tuticorin it read :

(Tuticorin)—"as no records appear to exist which prove that rupees were coined at these centres by the English Company".

Madras was captured by the French in the year A. D. 1746 and the English government moved to Cuddalore.

On the signing of the treaty of Aix-la-Chapelle, Madras was handed back to the Company in 1748, but due to the town's neglected state the seat of government was retained at Cuddalore until 1752.[1]

The government is known to have established a mint at Cuddalore during the period 1746 – 1752 and to have coined "Three Swami" Pagodas and Pagodas with a single deity with an inscription in English over the figure reading TEVNAPATNAM.

If an emergency had arisen, due to a shortage of rupees, it is possible that they may also have been coined at this mint.

Page 148, para 6.

For '1675' read '1674'.

Page 149, para 1.

For 'whlle' read 'while'.

Page 151, Item 8.

For '1795' read '1705'.

Page 153, para 5.

(*a*) Delete 'the' before the word 'rupees' in the second line.

(*b*) Add 'of' after 'Rupees' in the last sentence.

Page 153, para 6.

Read in continuation of this paragraph :

Since the publication of the record of a rupee of Muhammad Shah of regnal year 7 of Chinapatam mint two further references to rupees of this ruler from this mint have been noted.[2]

1. *Madras District Gazetteers—"South Arcot"*—Vol. i. 1906. W. Francis. I. C. S.

2. (a) *Journal of the Asiatic Society of Bengal* (New Series) Vol. vi. N. 11. 1910. *Numismatic Supplement* No. xv. No. 89. "Notes on some Mugal Coins"— R. B. Whitehead, I. C. S.

(b) *Journal and Proceedings, Asiatic Society of Bengal* (New Series). Vol. xxi. No. 6. 1925. "Some rare Coins found in the Central Provinces"—M. A. Suboor.

The regnal year on two of these coins is eight and it cannot be read on another. The regnal year eight would correspond with the year A. H. 1139 (A D. 1726).

In note 6 at the foot of page 153, P. L. Gupta has referred to two coins, which may be presumed to be rupees, with R. Y. 11 (A. D. 1728/29) and this may probably be the latest date when the mint name Chinapatam figured on the Company's coins.

Page 154, para 1.

Read in continuation of the second sentence :

Since publishing the record of the earliest dated rupee details of some other coins from Mylapore have been noted which establish that the mint was in operation in the year A. H. 1117 (A. D. 1705/1706) and even earlier.

One coin is a Mohur of Aurangzeb Alamgir I dated A. H. 1117, R. Y. 50.[1]

Two other rupees of this mint are referred to and illustrated in an article by Geo. P. Taylor, in the *Journal of the Asiatic Society of Bengal* (New Series) Vol. vi. No. 10. 1910. *Numismatic Supplement.* No. xiv. No. 84. and plate xxxv. Nos. 6 and 7 : "Some Coins from the Limbdi Treasury".

No. 6 Rupee. Mahilapur............ R. Y. 4 (x)
No. 7 Rupee. Mailapur. A. H. 1118. R. Y. 5 (x)

Coin No. 6 must have been issued between A. H. 1108-1118 (A. D. 1696-1706) The author refers to two other rupees from this mint in the article, but does not furnish details of the coins.

A rupee in the possession of P. Thorburn has the regnal year 4 (x) and must necessarily also have been coined in the period A. H. 1108 and 1118 (A. D. 1695-1706)

Page 154, para 5.

Read in continuation of this paragraph :

The doubt expressed regarding the necessity for an English mint at Arcot has received support in a recent publication[2] in which the author states :

1. *Journal & Proceedings, Asiatic Society of Bengal* (New Series) Vol. xxvi. 1930. No. 2. *Numismatic Supplement* No. xliii. No. 301. "Rare Mugal Coins in my Cabinet".—Vicaji D. B. Taraporevala.

2. *British Commonwealth Coinage*" by Howard W. A. Lineear, 1959. p. 33.

"Atkins continues his history with notes on a mint at Arcot (p. 163), but it is doubtful if the East India Company had a mint there."

A period when the Company may possibly have had a mint at Arcot was during the years 1751 and 1752. Clive captured the town in 1751 and the Nawab's mint could have been operated by the English, had the necessity arisen.

The Government had however established a mint at Cuddalore, in the period 1746 to 1752, at which pagodas were coined. If rupees had been required they could have been coined at Cuddalore, and it is unlikely the Nawab's mint at Arcot was used for a period of a year. It would not have been necessary to coin rupees at either of these towns after 1752 as the Government must have reopened the mint at Madras immediately on its return from Cuddalore.

Another reference to "Arcot" rupees being coined at the English mints at Madras, and not at Arcot, in 1743-44 is found in *Vestiges of Old Madras* by Love, Vol. II. p. 313. This would again confirm that the Company did not operate a mint at Arcot at this time and it is unlikely that it did at any later date.

Page 162, para 5.

For '1762' read '1742'.

Page 163, para 3.

This paragraph requires revision:

Porto Novo should be omitted as there is evidence in support of the fact that rupees were issued from a mint in the town by the Nawabs. The name of the mint appearing on the rupees is Mahmudbandar.

Page 163, para 6.

For '1739' read '1793'.

Add at the end after Sir Walter Elliot:

"Only so far as the rupees of the years A. H. 1212, 1213 and 1214, are concerned".

Page 163, para 7.

Delete this paragraph and substitute:

The Nawabs must also have had an agreement with the French and operated a mint at Pondicherry if the Diwan's information to Sir Walter Elliot is accepted as he refers to "Old Pondicherry" and "Pondicherry" rupees in the years A. H. 1186 (A. D. 1772) and A. H. 1207 (A. D. 1792) respectively and the rupees of A. H. 1191, 1200, 1201, 1203 and 1205 could also have been issued from this mint.

Page 164, para 1.

Insert the word 'been' between 'have' and 'engraved' in the last sentence.

Page 164, para 3.

Insert 'Nelson-Wright' after Vol. III in the sixth line.

Page 164, para 4.

For 'respect' read 'respects' in the fourth line.

Page 165, para 5.

Insert 'any' between 'for(and 'Mughal' in the ninth line.

Page 166, para 1.

For '1201' read '1209'.

Page 166, para 2.

Delete 'the' before 'Shah Alam II' in the third line.

Page 166, para 4.

Read in continuation of paragraph 4 :

Two other rupees must be added to the original list. Both coins are important and are illustrated.

(1) Rupee in the name of Shah Alam II, dated A. H. 1186, R. Y. 10, with a small four-petalled flower mint mark adjacent to the regnal year.

Weight 176.2 grains. Diameter 0.84 inches **(Pl. XIV. 1)**

(2) Rupee in the name of Shah Alam II, dated A. H. 1206, R. Y. 31, with a large four-petalled flower mint mark in the same position as in the first coin.

tittle, 'Wala', is incorporated in the tion for the first time.

Weight 175.0 grains. Diameter 0. 95 inches **(Pl. XIV. 3)**

Paragraph 5 on page 165 will require alteration as the rupee of A. H. 1206 proves that Muhammad Ali used the title 'Wala' on his rupees from this year. Add after 'rupees' in the second sentence :—'until A. H. 1206.'

The rupee dated A. H. 1186 (A. D. 1772) furnishes an earlier date than the previous earliest rupee of Muhammad Ali which was dated A. H. 1191 (A. D. 1777).

Rupees of the year A. H. 1205 (A. D. 1790), R. Y. 30 **(Pl. XIV. 2)** did not have the Nawab's title on the reverse and it is evident the title was used, on coins, for the first time in the year A. H. 1205/1206, (A. D. 1790/91).

Information concerning coins issued by the Nawabs in certain years was furnished by the Diwan to Sir Walter Elliot and this information is recorded by him on page 144, in a note at the bottom of the page, in *Numismata Orientalia—"Coins of South India"*.

"Old Pondicherry" rupees are mentioned when furnishing details of coins dated A. H. 1186 (A. D. 1772) and "Pondicherry" rupees for A. H. 1207 (A. D. 1792). Both dates are not covered by any of the periods of occupation of Pondicherry by the English.

On comparing rupees of A H. 1205 and 1206 **(Pl. XIV. 2 & 3)** the title is seen to be absent on the former, but is included on the rupees of A. H. 1206 and this would seem to establish that the title was not used on rupees from the year A. H 1186 to A. H. 1205.

It is not known when rupees were first coined by the Nawabs in Pondicherry, but we do know that the English captured and occupied the town, as allies of the Nawab, in the period A. H. 1175-1177 (A. D. 1761-63). The Nawab would have claimed the captured territory and town as he was fighting the French, with the support only of the English forces.

After occupying Pondicherry the Nawab must have established a mint, or used the French mint, and it is possible he continued to have a mint at Pondicherry from the date of its capture.

Rupees with the same mint mark must also have been coined at other centres in the Nawab's territory if we are not correct in assuming that the Nawabs had a mint at Pondicherry, as we have to account for rupees dated A. H. 1186, 1191, 1200, 1201, 1203 and 1205 with the new mint mark. A doubt in this connection was expressed in para 1 of page 167 of the original article.

Rupees coined at Pondicherry must, in the first instance, have been referred to by the general title of 'Pondicherry' rupees, but with the issue of the rupees of A. H. 1206, which include the Nawab's title, it is possible the rupees without the title were called "Old Pondicherry" rupees. The rupees from the year A. H. 1206 (A. D. 1791) to A. H. 1214 (A. D. 1799), which had the Nawab's title would then have been known as 'Pondicherry' rupees.

Rupees issued by Umdatu l-Amara in the years A. H. 1212, 1213 and 1214 must also have been coined at Pondicherry at the Nawab's mint under sanction obtained from the English. Rupees with these dates do not appear to have been issued by the English and the omission cannot be explained in any other way.

a

Page 166, paras 2 and 6.

The remark against coins Nos. 1126 and 1127 in the original text should be deleted, as also paragraph 6, as the regnal year must have been engraved on the dies of all rupees, but due to the dies being of larger diameter than the flans the figures were seldom seen on the later coins. A rupee of the year A. H. 1212 in the British Museum collection, has, what appears to be, the figure three where the regnal year is usually seen and this would suggest that regnal years were intended to figure on all coins.

Page 167, para 1.

For A. H. '1190' in line 6, read A. H. '1186', and again in line 11, the year A. H. '1191' should read A. H. '1186'.

Pages 167 and 169, para 10 and 2 respectively.

Correct the year '1691' to read '1687'.

Page 169, para 4.

The third sentence in the paragraph is intended to read: "It differs in many respects from the rupees issued by the

English East India Company ; the diameter is greater, the formation of the letters in the inscription and the general finish of the coin suggests that it could not have come from the English mint at Masulipatam."

Key to Plates, nos. VII & VIII.

Item 2. The query mark after 'Arcot' is wrong.

Item 3. A querry mark to be added after 'Arcot'.

Item 6. Weight '173·9' to read '173·6'.

Item 21. The year '1896' to read '1806'. Diameter of coin to be corrected from '0 84' to '0·94'.

Item 22. The year '1856' to read '1806'.

Note after Item 22. The year '1765' to read '1795'.

Coin-Weights of East India Company—Pages 179 & 180.

Description of the Coin-Weights.

1. '177' to read '179'.

4. '177 2/5' to read '176 2/5'.

5. 'Pl. X.6' to read 'Pl. IX.4'.

6. 'Pl. IX.4' to read 'Pl. IX 6'.

C. H. BIDDULPH

II

THE PROTOTYPE OF AN OBVERSE DEVICE OF KUSHĀṆA COINAGE

Addenda and Corrigenda

Please revise the article (*ante*, pp. 109-112) in the light of following directions :

(A) Insert II after the name of Gotarzes in all cases, except in the foot notes, where I or II or nothing should be inserted after 'Gotarzes' as per directions given below.

(B) Add after Gotarzes in line 5 on p. 110 a foot note no. 1 *a*. as follows :

"Wroth was not aware of the existence of two Parthian rulers called 'Gotarzes'. One Gotarzes, whose existence is indicated by certain Babylonian tablets, probably ruled from 91 to 81/80 B. C. over a part of the Parthian dominion. (N. C. Debevoise, *A Political History of Parthia*, p. 48-51). To this ruler cannot be ascribed the drachma referring to one

'Gotarzes, the (adopted) son of Artabanus' (I.S.). (Wroth, *loc. cit.*, pp. XLV, no. 28165). For, the identity of the bust of king appearing on this drachma with the same depicted on dated Parthian species, ascribable to the fourth decade of the 1st century A. D., definitely indicates that these coins should belong to one monarch called Gotarzes flourishing in the last mentioned period. This ruler should be known as Gotarzes II. (Wroth, *loc. cit.*, pl. XXVILXXVII for the relevant busts on coins). He was really a son of one Gew (*Journal of Royal Geographical Society*, Vol. IX, p. 114 ; Debevoise, *loc. cit.*, p. 174.)

The copper coin, which is attributed in the present article to Gotarzes II, does not contain any inscription. But identity of bust of king on the above mentioned drachma with the same on the coin under discussion leaves no room for doubt about the latter's ascription to Gotarzes II. In fact, all coins ascribed by Wroth to Gotarzes should belong to Gotarzes II.

Wroth concluded, mainly on the basis of the evidence of dated coins, that Gotarzes (i. e., Gotarzes II) ruled continuously from 40/41 A. D. to 51 A. D. According to Debevoise's calculations, Gotarzes II's continuous reign should be placed between 38 A. D. and 51 A. D. (Debevoise, *loc. cit.* p. 166-174)."

(C) Add the following at the end of fn. 2 on p. 111 :

"The *Shāhnāmāh* of Firdausi probably contains allusions to strained relations between a section of the Parthians and the Kushāṇas. This epic furnishes us with stories of struggle between Gudraz and his associates on one hand and Fārhād and his allies on the other. Among the friends of Fārhād was Kamus, the Kashan chief. Kamus was ultimately killed in the battlefield. Though Gudraz is here portrayed only as a general, and not as a king, it is probable that here we have a story which has its origin in the struggle between Gotarzes and Vardanes. The latter has probably been transformed into Farhad. (E, Warner, *Shāhnāmāh*, Vol. III, parts II & III ; *Journal & Proceedings of the Asiatic Society of Bengal* Vol. XXVIII, 1932, p. 207-224).

'Kashan' is obviously a variant or corruption of the nomenclature 'Kushāṇa'. As the struggle between Gotarzes II and Vardanes is known to have taken place in the fourth decade of the 1st century A. D, the Kashana (i. e. Kushāṇa) chief Kamus may wall be identified with either of the Kadphiseses. If we remember that on the coins, ascribable to Kujula Kadphises, the name of the king is spelt differently as Kaphsa, Kasa etc., and that Kamus is said to have been

killed in a battle which seems to have taken place in the fourth decade of the 1st century A.D., it will appear reasonable to identify the last mentioned ruler with the first of the Kadphiseses (*PMC*, pp. 181 & 182). For Kadphises II definitely ruled even after 50 A. D.

Thus the form 'Kamus' seems to be a variant or corruption of the name 'Kadphises' (I). Kadphises I was probably killed by the Parthians. Later Kadphises II probably won a part of the Parthian dominion.

It may be observed here that Kamus has also been referred to in the *Annals* of Ṭabāri (*Z. I.*, IV, p. 184). The author of the present article is trying to publish elsewhere a critical appraisal of the value of the *Shāhnāmāh* and the *Annals* of Ṭabāri as sources for reconstruction of the history of the Kushāṇas."

B. N. MUKERJEE

III

CUNNINGHAM COLLECTION OF SEALS

Addendum

Seal No. 31 (*ante*, p. 127): note to be inserted. "This seal is already published in Elliot, *Coins of Southern India*, Plate II, 48." (cf. *ASI,AR*, etc. to follow.)

M. G. DIKSHIT

REVIEW

C. S. UPASAK : *The History and Palæography of Mauryan Brahmi Script*, pp. XII + 345, published by Nava Nalanda Mahavihara, Nalanda (Patna), 1960.

This book, which was author's Doctoral thesis from the University of London marks the beginning of a new phase in the study of Indian Palæography which in fact should have taken place earlier. Dr. Upasak has, no doubt, by selecting this topic and by the treatment he has given to this difficult subject, opened a new line of work. The book consists of 7 chapters and as many as 44 appendices. It mainly deals with the origin of Brāhmī alphabet and the forms of individual letters of that alphabet as found in the Mauryan inscriptions. The discovery of a standard type of Aśokan Brāhmī is indeed striking and deserves serious consideration. The author has painstakingly analysed each and every letter and prepared charts which are not only revealing but quite exhaustive. He thinks that there was one standard form of letters and other forms were either mistakes or the results of individual style. Dr. Upasak has put in a great amount of labour in the preparation of this book and he has made a critical study of the subject in all its thoroughness. This book can very well serve as a model for similar detailed and exhaustive works analysing the alphabets of specific chronological and geographical areas. It is high time that such attempts are made now. We congratulate Dr. Upasak for this really useful contribution he has made to the field of Indological studies.

The printing of the book, however, needed more care and attention. No doubt the Tara Printing Works have done the job as best as they could but definitely the quality of publication would have improved if the letters were drawn more neatly and uniformly. However, the faithful copying of the alphabets does show the care which the author bestowed on it. Needless to say, the book will be of immense help to the students of Indian palæography.

A. K. N.

PRESIDENTIAL ADDRESS

&

THE PROCEEDINGS OF THE 50th ANNUAL MEETING OF THE NUMISMATIC SOCIETY OF INDIA

ALIGARH, 1960

THE NUMISMATIC SOCIETY OF INDIA

(*Founded 1910*)

P. O. HINDU UNIVERSITY, VARANASI-5

Purpose: The Society was founded for bringing together collectors of Indian coins and students of Indian numismatics and to investigate into the problems of Indian history and allied subjects through numismatics.

Membership: Applications for membership are welcomed from all interested in Indian numismatics. Inquiries regarding membership should be addressed to the Secretary of the Society.

Fee: The annual fee for an individual member is Rs. 12/- in India, £ 2/- in U.K., $ 7 in U.S.A. and equivalent of Rs 25/- for other countries. Issues of the Journal of the Society are distributed free to all members. Life membership subscription in India is Rs. 250/-, £ 30/ in U.K., $ 105 in U.S.A. and equivalent of Rs. 375/- for other countries.

Institutions like libraries, museums etc. and Business firms are eligible to become Institutional members of the Society on payment of Rs. 25/- in India, £ 3/- in U.K., $ 10 in U.S.A. and equivalent of Rs. 40/- in other countries as annual suscription.

Publications: *Journal of the Numismatic Society of India* is published twice a year in March and September. *Notes and Monographs* series consists of essays on a single topic, bibliographies, coin-lists, inventories, indices etc. *Memoirs of the Numismatic Society* consist of publications devoted to the coinage of India and allied subjects Bigger volumes on these subjects are also published occasionally. *Corpus of Indian Coins* series consists of the comprehensive catalogues of the different series of coinage in India meant to serve as standard works of reference. The Journal of the Society is given free to members and some of the publications on concession price.

Library: The Society maintains a library.

All communications regarding the Journal should be addressed to Professor A. K. Narain, Banaras Hindu University, Varanasi-5, for subscription, account bills etc. to the Treasurer and for other matters to the Secretary, the Numismatic Society of India, P. O. Hindu University, Varanasi—5.

PRESIDENTIAL ADDRESS

S. V. SOHONI

50th Annual Meeting of the Numismatic Society of India, Aligarh, 27 December, 1960

Fellow students of old coins, ladies and gentlemen,

According to our Society's constitution, a President has mainly to address an annual conference. This, however, is somewhat unusual honour to an ordinary revenue officer like me, practically all of whose time is spent away from centres of academic activity.

Many of my distinguished predecessors have expressed their views about two major points : first regarding factors which govern collection of numismatic data ; and, second, about factors which affect interpretation of those data, both in general and specific studies.

Five major objectives may be referred to in this context, along with dependant recommendations, for consideration of concerned authorities :

(1) That steps should be taken to promote collection of as many old coins and seals as possible.

(2) That available numismatic data should be sorted out and correctly described, as quickly as possible.

(3) That available details should be interpreted along sound lines.

(4) That there should be a planned programme of publication of such analysis.

(5) That results thus obtained, should be utilised not only for revising regional political histories; they should be used for improving narration of developments in India and also in countries having economic ties with India, in different periods of our history. We must remain wide awake in respect of discoveries of materials in our country as well as in other countries like Ceylon, Nepal, Pakistan, Persia, Afghanistan, Russia, Burma and China.

Methodical Collection of Maximum Coin Data

The present position of Indian numismatics, though somewhat better than what it was a generation ago, is capable of being materially improved if some admittedly feasible action were immediately undertaken, under proper supervision.

Where are these old coins which we are so anxious to collect ? They are mostly underground. But it has been repeatedly complained that examination of a large percentage of coins, as have already been taken out, has not been as sound as was possible and desirable.

According to mythology, Yudhisthira had stated in reply to a question that the number of those who were dead far exceeded that of those who were alive. If a calculation were made, of how many Indian coins there were with museums in this country and abroad, and in departmental collections and in private cabinets, I venture to hazard a guess that they may not exceed half a million. What ratio this figure bears to the number lying buried, is purely a matter of speculation. It is, however, safe to infer that if archæological exploration were undertaken immediately in every State in India, particularly, in all coin bearing sites, available coin data are likely to be doubled within a few years time.

Even our existing resources are impressive. Unfortunately, only a small fraction of them has been catalogued. Integral numismatic study as such is of but a fraction of that fraction which so far has been examined by some kind of numismatists; and it is only a portion of such expert examination which has been made available by way of printed publications. Along with Bhartrihari, one can say about coin material, dug out from the ground :

Utkhātaṁ nidhi-śaṅkayā kshiti-talaṁ.........

Pratāpaḥ kaṇa-varatako=api na mayā, trishṇe sakāmā bhava.

i. e., "I have dug out the earth surface in search of treasure. But I was not able to get even a broken shell."

Thus anybody possessing old coins, be it a museum or a department of Government or cabinets of educational institutions or private collectors, must subscribe to a rule of conduct, viz. that catalogues of such numismatic data should be prepared and maintained up-to-date. Position in this respect is, at present. far from being satisfactory. Our standard catalogues, particularly those published by the

British and the Indian Museums, the Lahore and the Lucknow Museums, were prepared many decades ago; and have clearly become out of date. Generally, other holders of coins, whether institutions or private collectors, have not listed their coin collections even under rough headings,

It is always rewarding to have a look at original materials whether they are inscriptions or coins. While one cannot doubt the supreme value of the contributions made by the earlier scholars, beginning with Alexander Cunningham, I suggest that it would be useful to look into their conclusions, as every increment in our knowledge is worth while for its own sake. Old facsimiles of coins should be particularly examined when their originals are not available.

Accordingly, it is recommended that this Society should make a census of those persons and institutions who collect and store old coins; and circulate among them a helpful questionnaire for submission of detailed replies; and also assist them in preparing replies by ensuring cooperation of nearby members of the Society and other persons interested in this subject. For this work, a time limit of six months may be fixed.

Our Society has appointed, from time to time, a Treasure Trove Act committee, but I fear that no concrete suggestions have yet been received from this committee. Accidental recovery of buried treasure still remains our major source of fresh material for research. I dare say, every year, not less than a hundred hoards are being reported, But actual accession of such finds into museum cabinets has continued to materialise on a very limited basis. For remedying this situation, it is necessary to give fuller discretion to recognised sanctioning authorities like curators of museums, superintendents of archaeological circles, etc. in the matter of rewarding finders of hoards. Alternative purchasers of unhoarded coins not only safeguard finders from a botheration of complying with legal formalities, but also are found carefully to build contacts with prospective agents as can operate in different places in their area, in known rich coin bearing sites. It is necessary to explain authoritatively to the inhabitants of such sites, what appreciable national service they would render if they could make over coins to museum or archaeological personnel. If they can do this without harassment or loss to themselves, they will do it more willingly.

A fruitful suggestion has been that *gram panchayat* executives should be educated regarding the importance of preserving such material for proper examination. This can

be done easily, as training camps for *gram panchayata mukhiyas*, *dalpatis* and *gram sewaks*, are being regularly held in practically every State in the country. What is necessary is to send across to *gram panchayat* department of State Governments, suitable literature for distribution on these occasions. Here again, cooperation of the local members of the Society as well as of curators and other archaeological personnel, in explaining points to these rural workers is likely to produce valuable results.

In this context, a reference must be made to an ever-growing danger of export of old coins and seals. There is reasonable suspicion that even bigger antiquities, e. g. paintings, metal or stone images, etc. are being occasionally sold to persons whose stable allegiance is, *prima facie*, in favour of institutions outside this country. Even assuming that after purcease, such antiquities would be retained in this country, at least for a few years, it is evident that both the vendor and the purchaser would continue to avoid giving any publicity to their transaction. When this is the position in respect of big antiquities, it can be imagined how much exposed old coins are to a positive risk of suppression regarding their find spots and other material details. To meet this threat, there is no alternative but to create an enlightened public opinion as would continuously operate against it.

Commercial interest in old coins as antiquities, which would fetch more than their bullion value, has considerably increased in recent years. A number of coin dealers are astute and keen students of Indian epigraphy and numismatics. But it cannot be overlooked that forgeries of old coins are being more prominently noticed now than in earlier years. Thus, what some Rawalpindi dealers did for Inco Bactrian coins, is being attempted in respect of Gupta period and early Muslim period coins. One has to be more careful about what are offered as unique types. A clever forgerer can produce as many of these as he likes, by selecting an obverse from one type and a reverse from another.

All trained numismatists, have a duty to perform in this connexion. As is well known, it is fairly easy to detect forgeries from moulds. Forged cast coins are usually of dull and frosty appearance. There is excess of sharpness of the rim, and the letters are many times linked up, especially, if they are crowded on the original. The surface is also not polished and even, but contains minute holes or obtrusions due to air bubbles. Such information must be imparted to

defeat unscrupulous persons. A possible objection is that if this were done and once knowledge of these points was not confined to a limited number of experts the forgerers might improve their art. But it is worth while educating the public regarding such forgeries.

Within a few weeks enumerators in all parts of our country would conduct census operations. Their questionnaire may include an item on antiquities. With the cooperation of the census superintendents in different states, it should be possible quickly to know which sites have yielded old coins in the post, either periodically, e. g. after rains every year, or infrequently. I would request the members to get into touch with census personnel in their areas for securing such information.

2

Correct Sorting Out and Description of Old Coins, within Prescribed Time Limits

I endorse a suggestion already made ,by Dr. Sircar concerning functions and responsibility of our National Museum in regard to numismatic research. It should acquire from among duplicates of other museums, coins for its own cabinets, and function as an effective coordinating agency for exchanges of duplicates among other museums. For this purpose, it should compile up-to-date lists of collections of coins in this country and in other countries. It should help students of numismatics in supplying them metal as well as plaster casts of coins at moderate price ; and in helping with information on individual topics. In cooperation with the National Archives organisation, it should conduct research into old historical correspondence about minting of coins, particularly about their metallic contents.

As most museums in this country do not have expert numismatists on their staff, it would follow that an appreciable percentage of coins in their cabinets have remained, since their accession, generally unexamined. This indifference must be ended, without further delay.

Many times, hoards have been distributed before prior examination when they were intact. Secondly, coins held in treasuries of former Indian States, have also largely escaped even bare listing. Thirdly, there has been, comparatively, little progress in South Indian numismatics as well as in coins of mediæval Indian history. Another item which deserves fuller attention is proper examination of clay seals,

especially those found in North India. A study of clay seals in Nalanda area in Patna district, based on identification of place names recorded on them, has thrown an interesting light on development of that great centre of learning and how its activities were financed. I am publishing this study, shortly.

Even preparation and circulation of lists of such coins, without waiting for their detailed individual description, will prove of palpable help in promoting numismatic studies. Careful re-examination of old hoards has already yielded interesting conclusions, e. g confirmation of old Jain literature account of a tug of war, of varying fortunes, between Nahapāna and Gautamiputra Sātakarni. Find spots of coins are generally mentioned in forwarding letters which are kept in old museum files without relevant details being carried forward to an accession register. Painstaking examination of such references would prove fruitful.

According to Dr. Kosambi, it is a crime to break up a hoard. He maintains that if it were possible to weigh and to examine different coins constituting a hoard in a really good laboratory, an accurate idea was possible of the wear and tear of individual specimens and of the period of their circulation, thereby throwing some light on contemporary political and economic conditions This is a useful suggestion which deserves more attention than it has secured so far.

I think, our Society would be justified in advising authorities concerned about the employment schedule for trained numismatists. I suggest that this advice should be tendered to concerned departments of Governments, etc. as soon as possible. It will, at least, lay stress on the existing defective set up in many an institution.

Apart from appointment of trained numismatists in a larger number than has been hitherto possible in museums and departments of archæology, both of the Central the Sate Governments, which step would [illegible] the existing scant enthusiasm for study of coins where it is most needed, I suggest that the Society should obtain and circulate, say four times a year, lists of coins newly received in museums .etc. along with information about discoveries of hoards, among its members as well as State Governments and selected educational institutions, for their information and necessary action. For this purpose, there should be a selection of numismatic reporters who should be given suitable honorarium for their labour.

3

Interpretation along Sound Lines

For a correct appreciation of numismatic data, it is necessary to poseess adequate knowledge of relevant scripts, of ancient geography, as well as other relevant information concerning political, economic and social conditions. Considering that those documents in metal are so small in size, it is remarkable how much light they can throw on history, provided their examination is, every time, patiently done and objectively reviewed.

Some past Presidents have sounded a note of warning, to students of numismatics in particular, and of ancient history in general, against rushing to conclusions on imperfect data, and against resisting a tendency to attack established views on manifestly slender clues. I respectfully agree with them on these points. The young numismatist would do well to remember that if standards of a proper menal discipline were to be respected, he must make himself thoroughly familiar with all facts and evidence on his topic of research, look at it as objectively as possible and draw conclusions as will seek support from a minimum of pure speculation.

There is no doubt that ancient Indian coinage gives full scope for study of symbols ; and that these symbols are telltale. It was Buddhaghosha who observed 1500 years ago that an expert could identify individual punch-marked issues on studying their devices as they related to geographical details. A study of cultures which explains these symbols as a device for signalling more information than could be written down in plain words, is thus essential to a student of that period.

Literature is recognised to be a mirror of life. Accordingly, literary sources have been wisely and profitably utilised for study of coins. I am inclined to rely more on this source, when alternative explanations are possible, largely because, in our country, there was what was called a minimum acquaintance with arts prescribed for and possessed by every artisan—and mintmasters were no exception. Thus, a knowledge of art motifs and literary conventions has a definite utility in appreciating coin evidence.

I would like to give one example. It is well known that Chandragupta Vikramaditya was responsible for bringing out a new coin-type, viz. his horseman type. As an explanation of this innovation, is was suggested, "Chandragupta was probably himself a renowned horseman and he may, therefore, have conceived the idea of representing himself on some of his coins

as riding on his horse and marching to the battlefield to win martial glory." This view puzzled me, as mounted archers were not a feature of old Indian military organisation. After carefully looking into relevant details, it was found that this coin-type was but yet another addition to a series of types depicting royal pastimes—it was meant to show a king practising archery on his riding grounds. An exact description of the obverse was given in the *Mudrā-rākshasam* (VI. 9) :

Śāriṅgā karshāra-muktā praśithila-kaṇikā
pragrahenātra deśe,
Devenākāri chitraṁ prajavita-turagaṁ
bandhamekshaśchaleshu.

The kings improved aim by shooting arrows from horseback on their private grounds ; in battles, they rode out in chariots.

A numismatist has, occasionally, to take assistance of other sciences for a correct appreciation of coin data. In a study of Gupta coin-type, showing a queen offering a bunch of fruit to a peacock, it was found recorded in catalogue descriptions that it was a bunch of grapes. This was not correct. It was a twig of *jamun*. The botany of the Indian lotus has been found to be extremely useful in understanding the employment of lotus motif on Indian coinage. I am publishing, separately, a study on this subject.

4

Publication of Analysis

For broadening the base of numismatic studies in India, one has not only to collect coin data available in this country and in neighbouring countries and to sort it out and have it described accurately and interpreted along sound lines. It is equally necessary that results of their examination are set forth in conveniently printed volumes of research. Our Society has a plan of bringing out a series of corpus works. Out of ten such projected works, one has been published already, dealing with Gupta coinage ; another on Indo-Greek coinage is expected to be out shortly ; and I understand that a third, devoted to punch-marked coins, has been put together. Works on the rest must be pursued vigorously.

It is desirable that the entire territory of publication is carefully mapped out and assignments of definite jobs made to individual numismatists, based on a principle of efficiency through division of labour. It follows that there should be

a team of advisers guiding such individual enterprises and ensuring minimum standards.

I would also recommend that a standard manual of Indian numismatics at a subsidised price, should be brought out within a period of two years, as a definite step towards good public relations and for doing propaganda towards coin collection and its proper interpretations.

It is also necessary to bring out suitable publications in Indian regional languages, as a part of a plan to spread knowledge about old coins. I hope that our Society would do all that it can to promote such a publications programme. Personally, I have no doubt that required funds can be had through cooperation of Central and State Governments, educational trusts, associations of bankers and of bullion merchants.

5

Utilising Results of Numismatic Analysis

While some noteworthy work has been done along these lines, there has been inadequate appreciation of available information about coin devices by our existing mints, which have no numismatists on their staff, and by the Posts and Telegrapa Department, which I am afraid, has not yet explored the vast scope that exists for introducing some aesthetics in its issues of postage stamps. Depictions of animals (elephant, lion, tiger, horse, bull, deer and rhinoceros), or birds (hawk, eagle, peacock, etc) have been successfully attempted in ancient Indian coinage Then there is rich material based on employment of lotus motif. All this, however, has remained unused in our contemporary coins as well as postage stamps. Accordingly, I would plead for consultation between a team of numismatists and mintmasters as well as authorities of Posts and Telegraph Department, A committee may be appointed for this purpose.

As coins are useful in dealing with historical subjects, there is a case for more extensive use of them than is being attempted in our post-graduate classes. Details of coins can be made interesting even in schools. I made a clay model of the depiction on the reverse of the horseman coin type of Kumāragupta. The result was an easier appreciation of the genius of his mintmaster. This provoked interest among all who saw the model. Similarly, another model was prepared of the obverse of the couch-type coin of Chandragupta Vikramāditya, which focussed attention to

a number of hitherto unknown aspects, besides being of considerable value in understanding the palace architecture of Gupta period.

By and large, we have not yet utilised numismatic evidence in re-constructing developments in Indian costume as well as ornaments. This is fascinating study.

I strongly recommend that museums and even departments of archaeology, should help in making such models available to educational institutions at reasonably low cost. It would be a distinct aid in teaching ancient Indian history.

A contemporary observer of Indian affairs has said that analysis of conditions in this country was rather like going through a long tunnel. On few hundred yards after entering its mouth, you have some, but not necessarily adequate, guiding light behind you to pick out its rough outline. Then, apart fram an occasional flash, darkness and confusion take over; and guiding lines only begin to gleam again towards the end of your journey.

This holds good in most historical exploration. Our aim is, doubtless, to obtain almost mathematically precise knowledge of every inch of our ground so that no gap of any kind is left anywhere.

Coins have played a vital role in adding to our knowledge of India's past. Their obverse and reverse surfaces have disclosed a number of links explaining both the emergence and disappearance of a political authority in this or that region. Collecting and understanding old coins is an absorbing hobby. Let us express a hope that through our organised efforts, not mere coin collecting but real numismatic study would be promoted in this country; and that significant steps would be taken in every direction, before we meet again for the next annual session. Meanwhile, much hard work has to be done.

Proceedings of the Meeting of the Executive Council of the Numismatic Society of India, held at Aligarh, 1960

The meeting of the Executive Council of the Numismatic Society of India was held under the Presidentship of Shri S. V. Sohoni on the 28th December, at 8. 30 a. m., in room no. 20, S. S. Hall, Muslim University, Aligarh.

The following members were present :

(1) Shri S. V. Sohoni
(2) Shri A. N. Lahiri
(3) Dr. P. L Gupta
(4) Shri K. D. Bajpai
(5) Dr. P. M. Joshi
(6) Dr. H. V. Trivedi

The following resolutions were passed :

(1) Resolved that the audited accounts for the year 1959-60 and the estimated budget for the year 1961-62 (as submitted by Shri J. N. Tiwari, representing the Secretary) be approved and placed for consideration in the Business Meeting of the Society.

(2) Resolved that Messrs. Ghanshyam Das & Co., Chartered Accountant and Auditors, Bansphatak, Varanasi, be appointed Auditors for the year 1961-62, on an honorarium of Rs. 60/- (rupees sixty only).

(3) Resolved that the services of Shri Badri Prasad, peon-cum-daftary be confirmed in the grade of Rs. 30-1-45-1.50 nP.-60 with a dearness allowance of Rs. 22/- (rupees twenty-two only).

(4) Resolved that a bicycle be purchased for conducting the office work of the Society and Rs. 200/- (rupees two hundred only) be sanctioned for the purpose.

(5) Resolved that a duplicator (Gestetner) be purchased and a sum of Rs. 1,200/- (rupees twelve hundred only) be sanctioned for the purpose and that the machine be purchased after the approval of the President.

(6) In view of the growing complaint of the members regarding the loss of copies of the Journal when sent by ordinary post, it is resolved that the copies of the Journal be sent by registered post.

(7) It was resolved that a committee consisting of the following persons be formed to examine what changes were necessary in the constitution of the Society and to make recommendations for consideration at the next meeting of the General Body.

(1) President
(2) Chairman
(3) Vice-Chairman
(4) Secretary
(5) Dr. P. M. Joshi.

(8) Resolved that Shri S. V. Sohoni be proposed for election as President for the next session of the Society.

(9) Resolved that the Golden Jubilee Celebrations be postponed from March 1961 to October 1961, as this would enable better preparation and also be more convenient to all concerned.

(10) Resolved that a recommendation be made to the General Body to confer honorary fellowship on Shri Prayag Dayal who was associated with the Society for a long period as Secretary as well as President (for four years) and has enriched Indian numismatics by his Catalogue of Coins of the Delhi Sultanate and of the Nawabs of Awadh and has contributed a number of research papers on mediaeval numismatics.

(11) It was resolved that the President be authorised to settle the matter of the publication of the Corpus works including the General Editorship and to expedite bringing out volumes of the series.

(12) Resolved that the Society's thanks be conveyed to the local Secretary of the Indian History Congress, Muslim University, Aligarh, for the very kind hospitality offered to the members of the Society by the University and for according facilities for holding meetings of the Society.

(13) Resolved that the list of members of the Golden Jubilee Committee be circulated among the members of the Executive Council and that for working out further details, steps should be taken through sub-committees formed for the purpose, in consultation with the President and the Secretary.

(14) It was decided to have sub-committees as follows, and to settle their further composition at the next meeting of the Jubilee Celebrations Committee, which will be held at Varanasi, in the office of the Society, on 22 January 1961, at 2 p. m.—

(1) Accommodation Committee
(2) Pandal Sub-Committee
(3) Finance Sub-Committee
(4) Exhibition Sub-Committee—
 (i) Shri A. Ghosh
 (ii) Shri Rai Krishna Das
 (iii) Shri H P. Poddar
 (iv) Kr. Mahabir Prasad

(5) Publications Committee—

This committee will consist of Dr. H. V. Trivedi, Dr. A.K. Narain and Dr. P L. Gupta, and include the President as convenor, and Dr. V. V. Mirashi, Dr. D. C. Sircar, Dr. Moti Chandra and Dr. P. M. Joshi as advisers.

(15) It was decided to form a Reception Committee for the Celebration of the Golden Jubilee and to request the following persons to be members of the Committee.

(1) The Chief Minister, U. P.
(2) The Education Minister, U. P.
(3) The Maharaja of Banaras
(4) The Maharaj Kumar of Vijayanagaram
(5) Vice-Chancellor of Sanskrit University, Varanasi
(6) Mayor of Varanasi Municipal Corporation
(7) Commissioner of Varanasi
(8) Pro. Vice-Chancellor of Banaras Hindu University
(9) Kr. Mahabir Singhji
(10) Dr. Suryakanta Shastri, Principal, College of Indology
(11) Vice-Chancellor, Banaras Hindu University, Chairman.

(16) It was decided that among other items, the Golden Jubilee committee should bring out a publication containing a series of portraits of rulers in Indian history, depicted on old coins, along with their descriptive notes, and also a series of suitable picture post cards of coins.

(17) The following were elected as Members of the Executive Council of the Society for the year 1961.

(1) Dr. P. M. Joshi
(2) Dr. P. L. Gupta
(3) Shri A. N. Lahiri.
(4) Shri B. C. Jain
(5) Dr. R. [illegible]
(6) Dr. M. Rama Rao
(7) Sardar A. A. Patil
(8) Maharaja Kumar Raghubir Sinh

The above mentioned resolutions were passed in the General Business meeting later.

NUMISMATIC SOCIETY OF

Balance Sheet as at

Figure of the previous year		LIABILITIES.				
Rs.	nP.		Rs.	nP.	Rs.	nP.
5,000	00	SPECIAL PUBLICATION FUND :—	5,000	00	7,659	43
		Add Excess of Income over Expenditure.	2,659	43		
13,472	78	BUILDING FUND:—	13,472	78		
		Addition during the year.	2,360	00	15,832	78
2,838	13	SUNDRY LIABILITIES				
		To Authoris honorarium Draftsman charges etc.	2,838	13		
		Less Publication Expenses.	2,040	00	798	13
9,586	68	GENERAL FUND.			9,586	68
		GOLDEN JUBILEE FUND.			10,000	00
30,897	59		Totals		43,877	02

AUDITOR'S

We have examined the annexed Balance Sheet from as at Account for the year ended from 1st April 1959 to 31st March and vouchers and beg to report that :—

We have obtained all the information and explanations

In our opinion the annexed Balance Sheet exhibits a true ding to the best of the information and explanations given to

Treasurer. *Secretary*

INDIA, VARANASI.

31st March 1960.

Figure of the previous year Rs.	nP.	ASSETS	Rs.	nP.	Rs.	nP.
720	50	MEDAL (DIES) A/C.			720	20
1,468	50	FURNITURE A/C.	1,468	43		
		Addition during the year	15	01		
			1,483	44		
		Less Depreciation.	89	20	1,394	24
138	91	LIBRARY (AT COST)			138	91
7,000	00	INVESTMENTS (AT COST).			7,000	00
		CASH & BANK BALANCES :—				
128	30	Cash in hand.	293	31		
16,316	45	with state Bank of India C/A.	19,205	06		
5,125	00	With State Bank of India Fixed.	15,125	00	34,623	37
30,887	59		Total Rs.		43,877	02

REPORT

31st March, 1960 and the annexed Income and Expentiture 1960 of the NUMISMATIC SOCIETY OF INDIA with books

we have required.

and correct view of the state of affairs of the Society accor-us and as shown by the books of the Society.

Dated :—23rd July 1960. Varanasi.

GHANSHYAM DAS
Charatered Accountants.

NUMISMATIC SOCIETY OF

Income and Expenditure Account for

Figure of the previous year	EXPENDITURE		
Rs. nP.		Rs. nP.	Rs. nP.
5,052 06	To Printing & Stationery.		3,417 49
204 70	,, Office Expenses of Chairman.		...
1,290 00	,, Office Expenses of Editor.		652 50
181 50	,, Office Expenses of Secretary,		542 00
834 87	,, Contribution Charges.		111 00
589 00	,, Postage & Telegrams.		573 00
1,210 00	,, Salary & Allowance.		1,330 00
39 27	,, Bank Charges.		47 83
153 55	,, Sundry Expenses.		30 36
216 98	,, Travelling & Conveyance.		350 00
30 00	,, Auditor's Honorarium.		40 00
	,, Draftsman Charges.		10 00
	,, Author's Honorarium.		220 00
	,, Depreciation on Furniture.		89 20
3,381 95	,, Excess of Income over Expenditure.		2,659 43
13,183 88	Total Rs.		10,072 81

Treasurer *Secretary.*

INDIA, VARANASI.

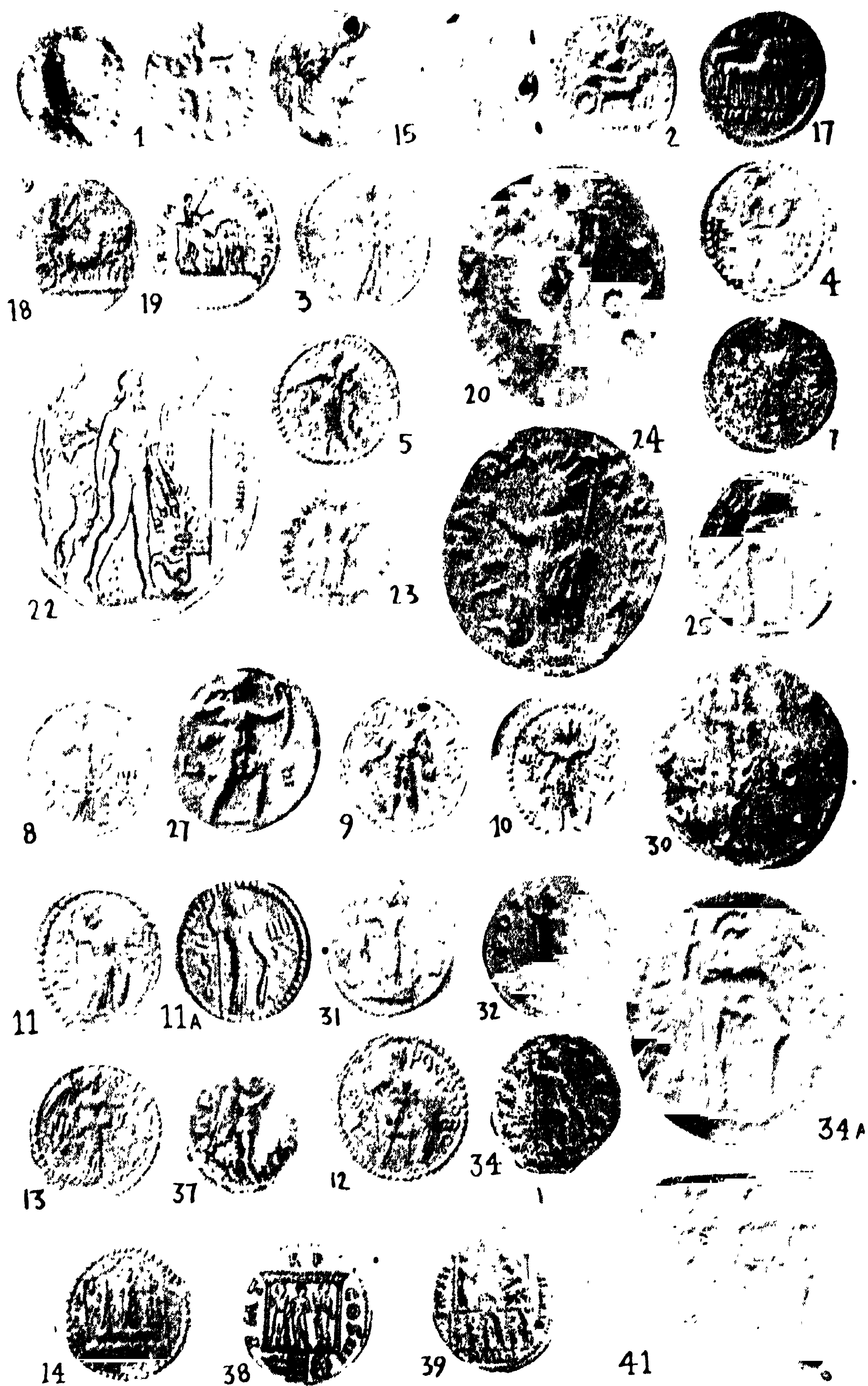
the Year ended 31st March 1960.

Figure of the Previous year	INCOME		
Rs. nP.		Rs. nP.	Rs. nP.
3,562 44	By Sale of Publcation.		2,609 45
1,296 44	„ Subscriptions.		1,706 76
125 00	„ Interest of Fixed Deposit.		
	„ Sale of Gupta Coins.		56.60
300 00	„ Life Membership Subscription.		
7, 900 00	„ Government Grants:-		
	Rajasthan Govt. Grant 1958-59.	100 00	
	Bombay Govt. grant 1958-59.	300 00	
	Madras Govt. grant 1958-59.	300 00	
	Director of Public Instruction West Bengal 1958-59.	300 00	
	Director of Public Instruction Punjab. 1958-59.	300 00	
	Bhopal Govt. grant 1957-58.	300 00	
	Bhopal Govt. grant 1958-59.	300 00	
	U. P. Govt. grant 1959-60.	500 00	
	Central Govt. grant 1959-60.	3,000 00	
	Rajasthan Govt. grant 1959-60.	[illegible]00 [illegible]0	5,700 00
13,183 88		Total Rs.	10,072 81

As per our report on that date.

Dated :—23th July 1960
Varanasi.

GHANSHYAM DAS & CO.,
Chartered Accountants.



Roman Patterns for Kushāṇa Coins



1 OBV.



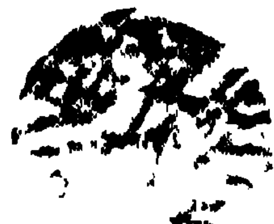


1 REV.

1 A

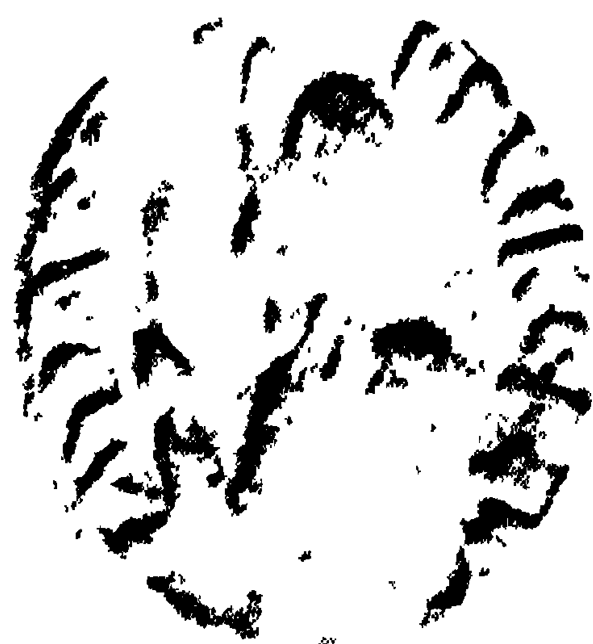


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3



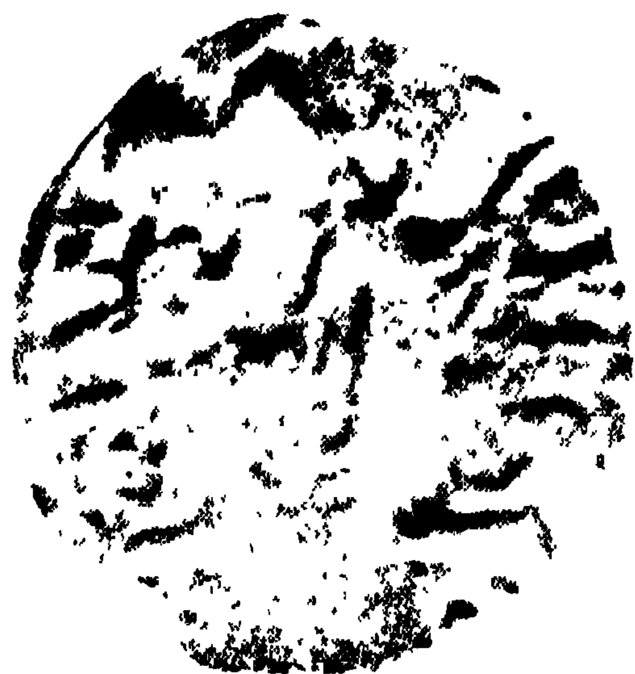




2A

4

3A







Unique Gold Coin of Huvishka (1) and Silver Coins of Huvishka (2-4).


1


2


3


1A


2A


3A


4


4A

Kushāna Gem-Seals in the Hermitage


1


2


3


1A


2A


3A

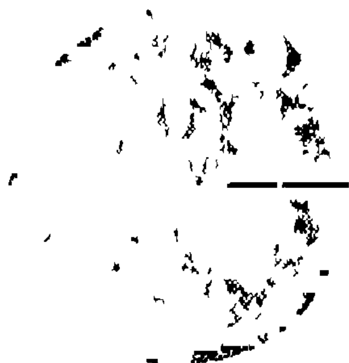





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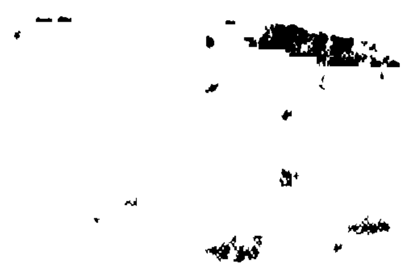


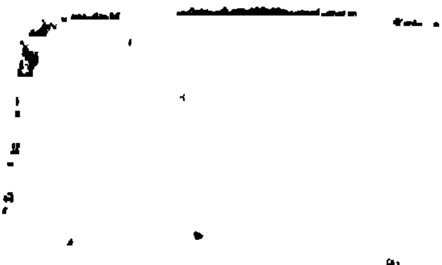

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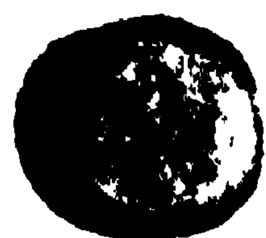

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11



Coin of Vima and Parthian Prototypes (1-4), Śaka-Sātavāhana Coins (5-9), and Coins from Uparkot (10-11)


1


2


3


4


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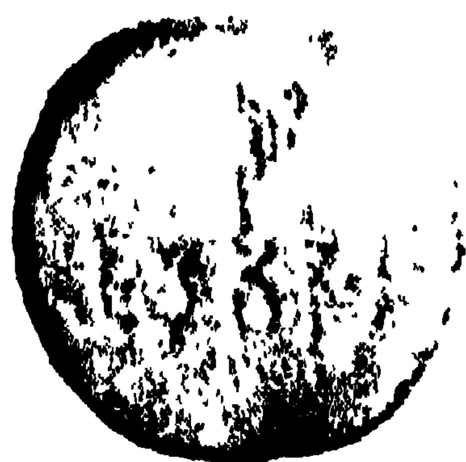

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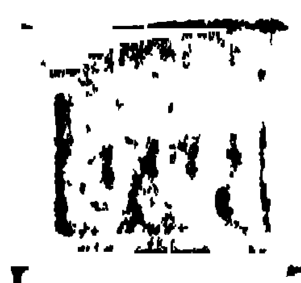

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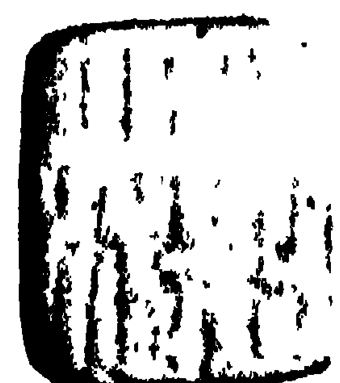

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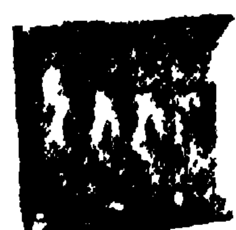

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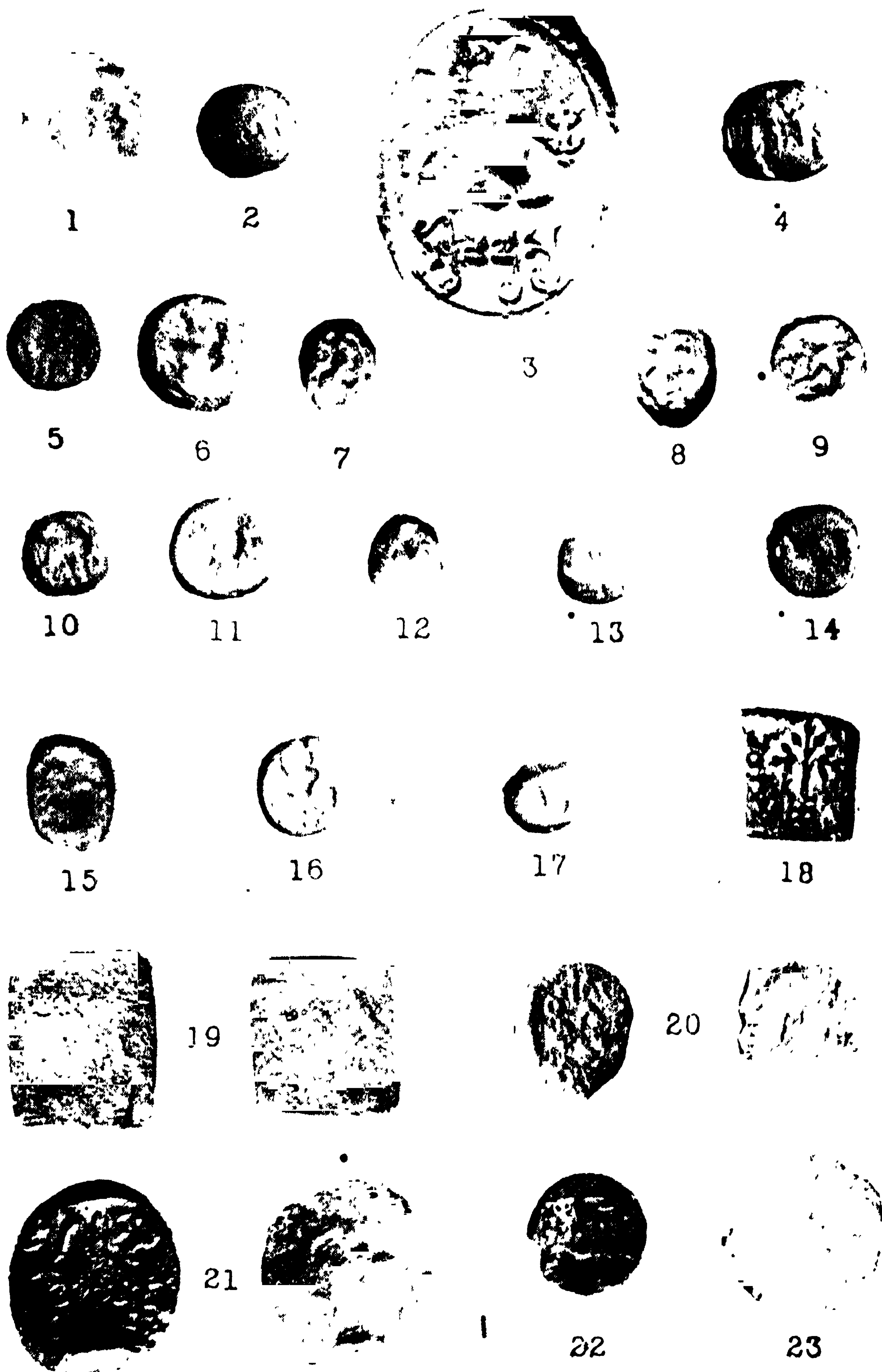

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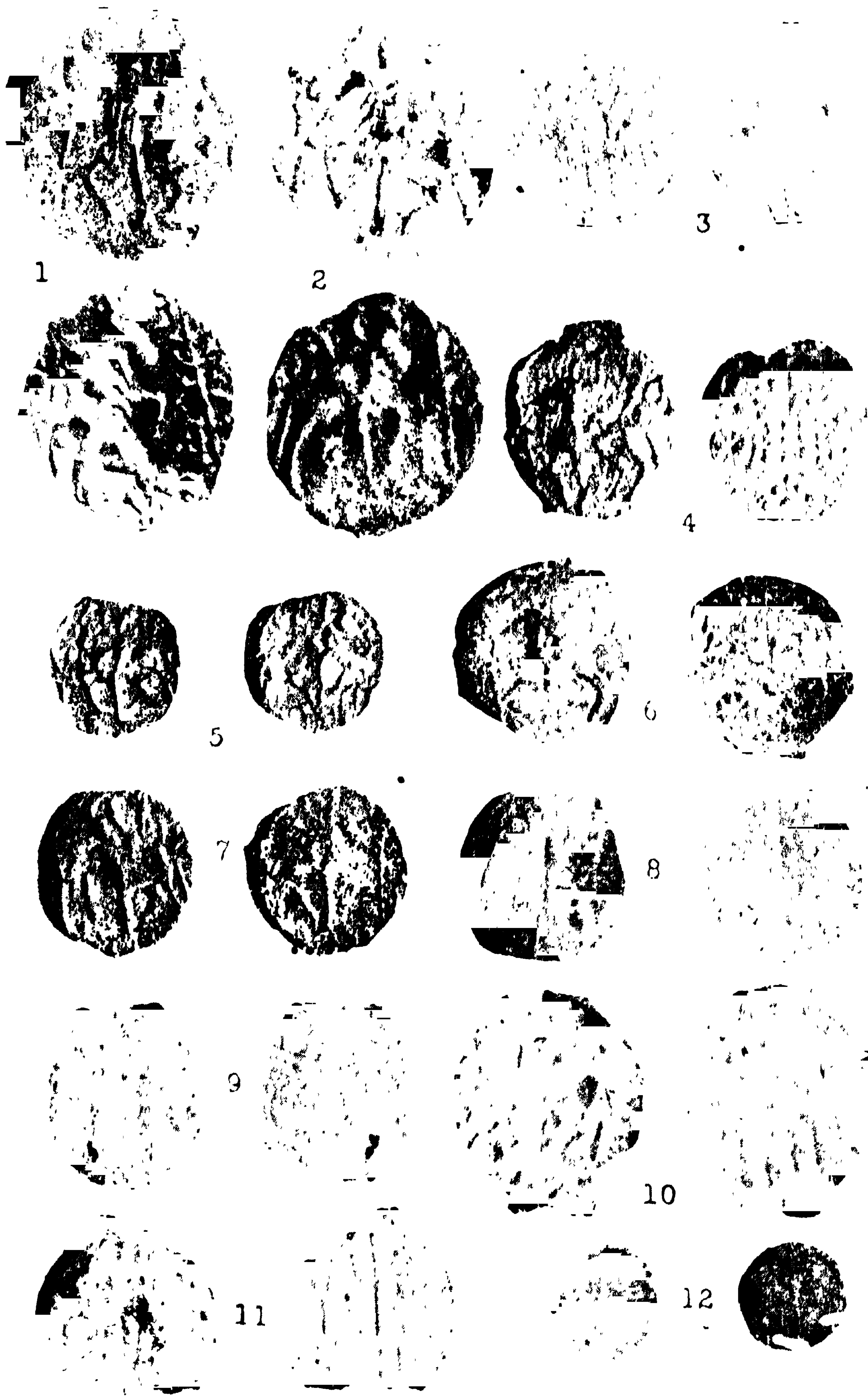

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29

Cunningham Collection of Seals in the British Museum

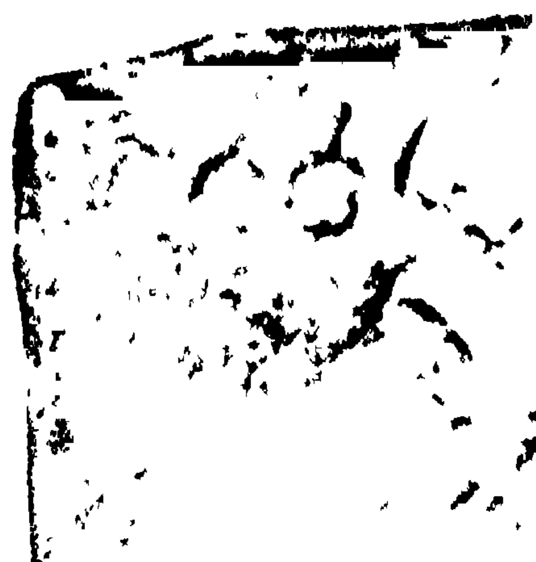


Cunningham Collection of Seals in the British Museum (1-17), and Copper Coins from Kauśāmbī and Vidiśā (18-23)



Coins from Kauśāmbī


1

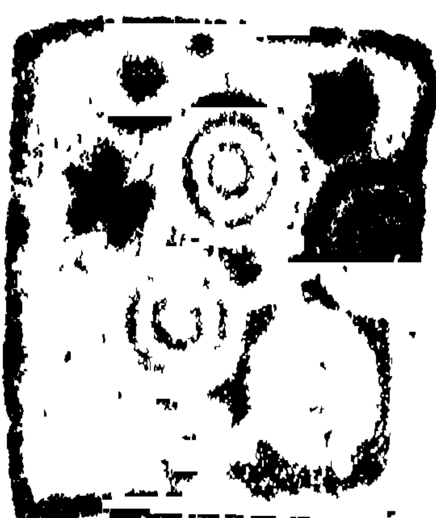

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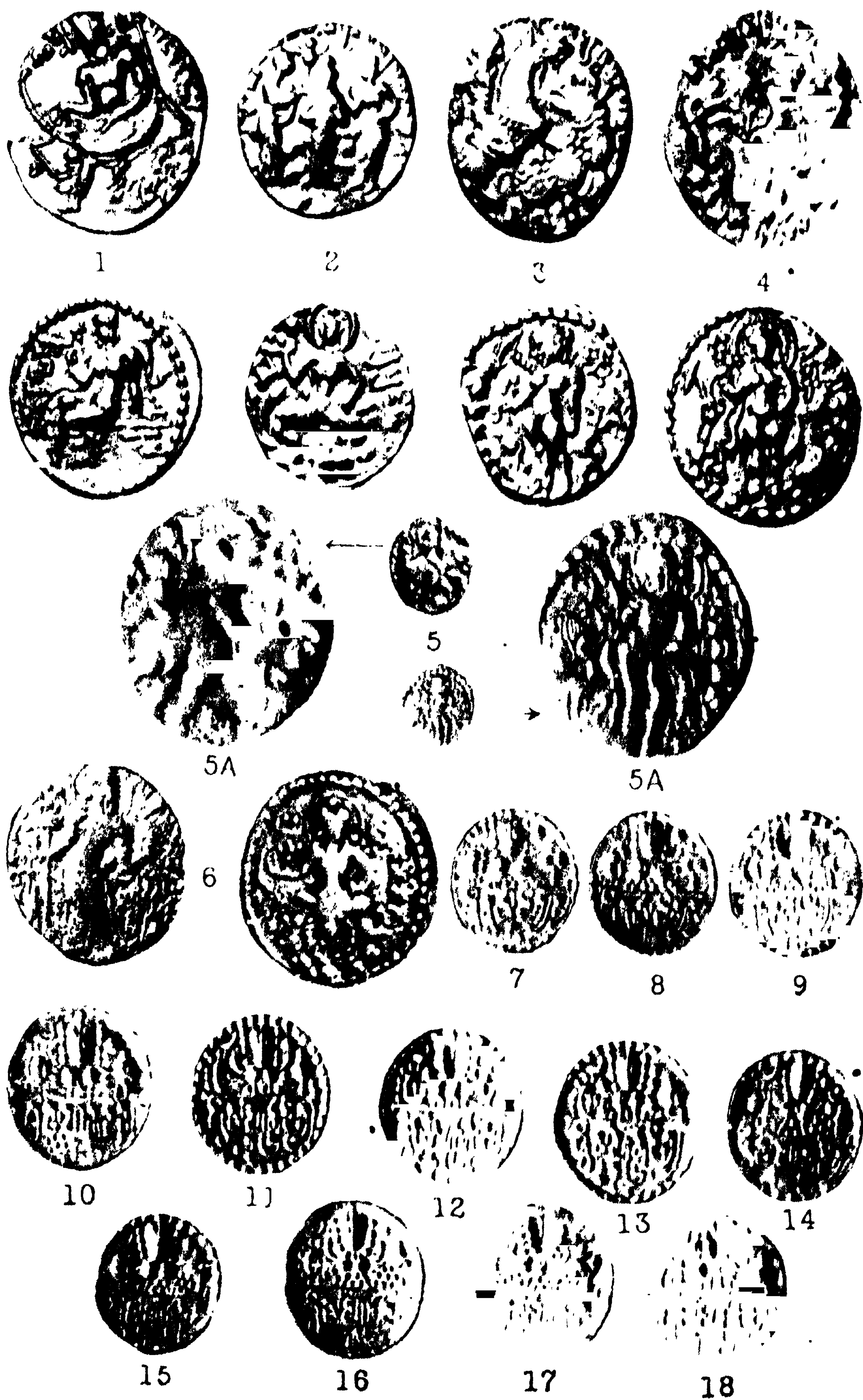
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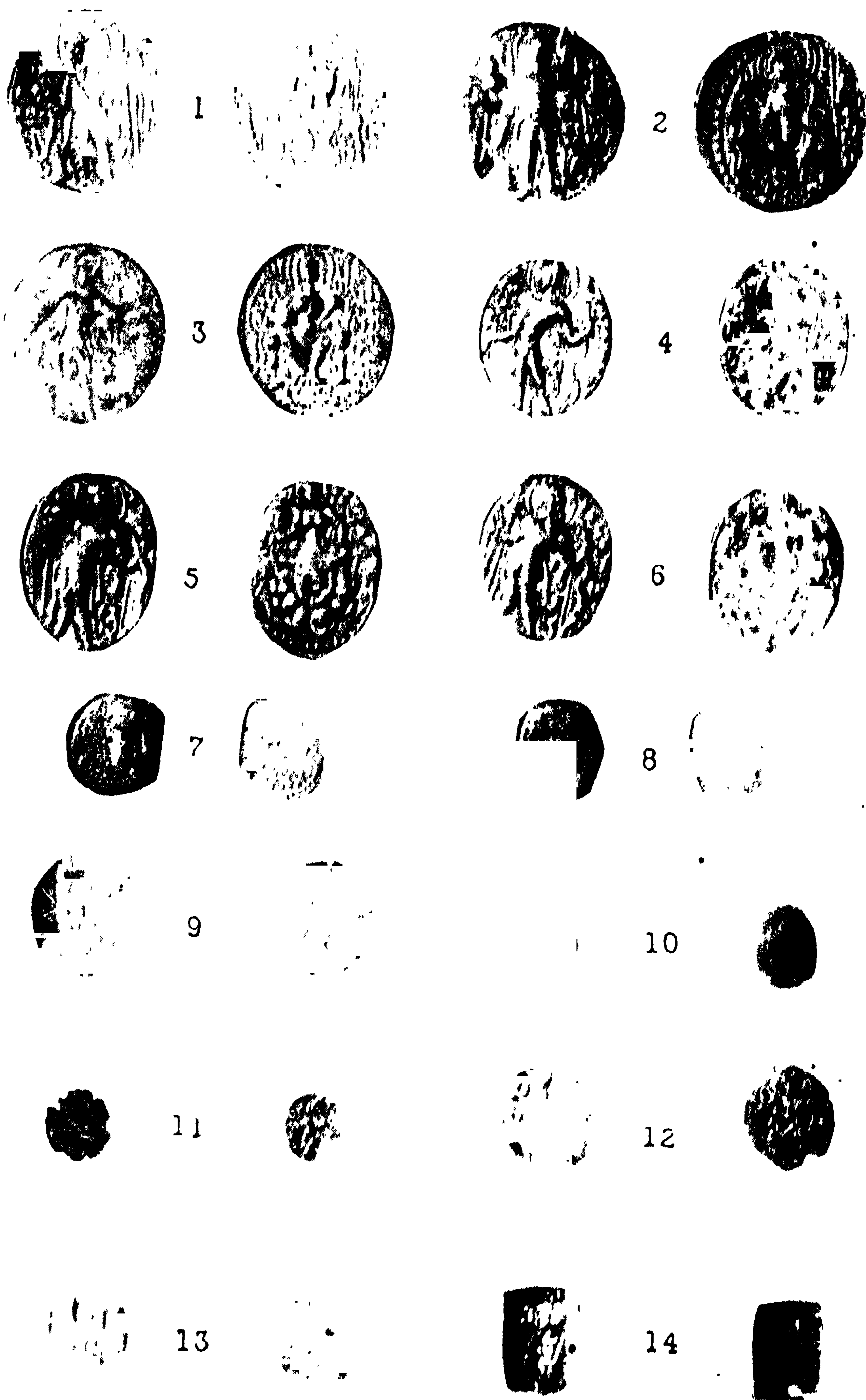

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Coins of Sātavahana (1-8), Gautamīputra Sātakarṇī (9), Pulumāvi (10), and A Coin of Sebaka Dynasty (11)



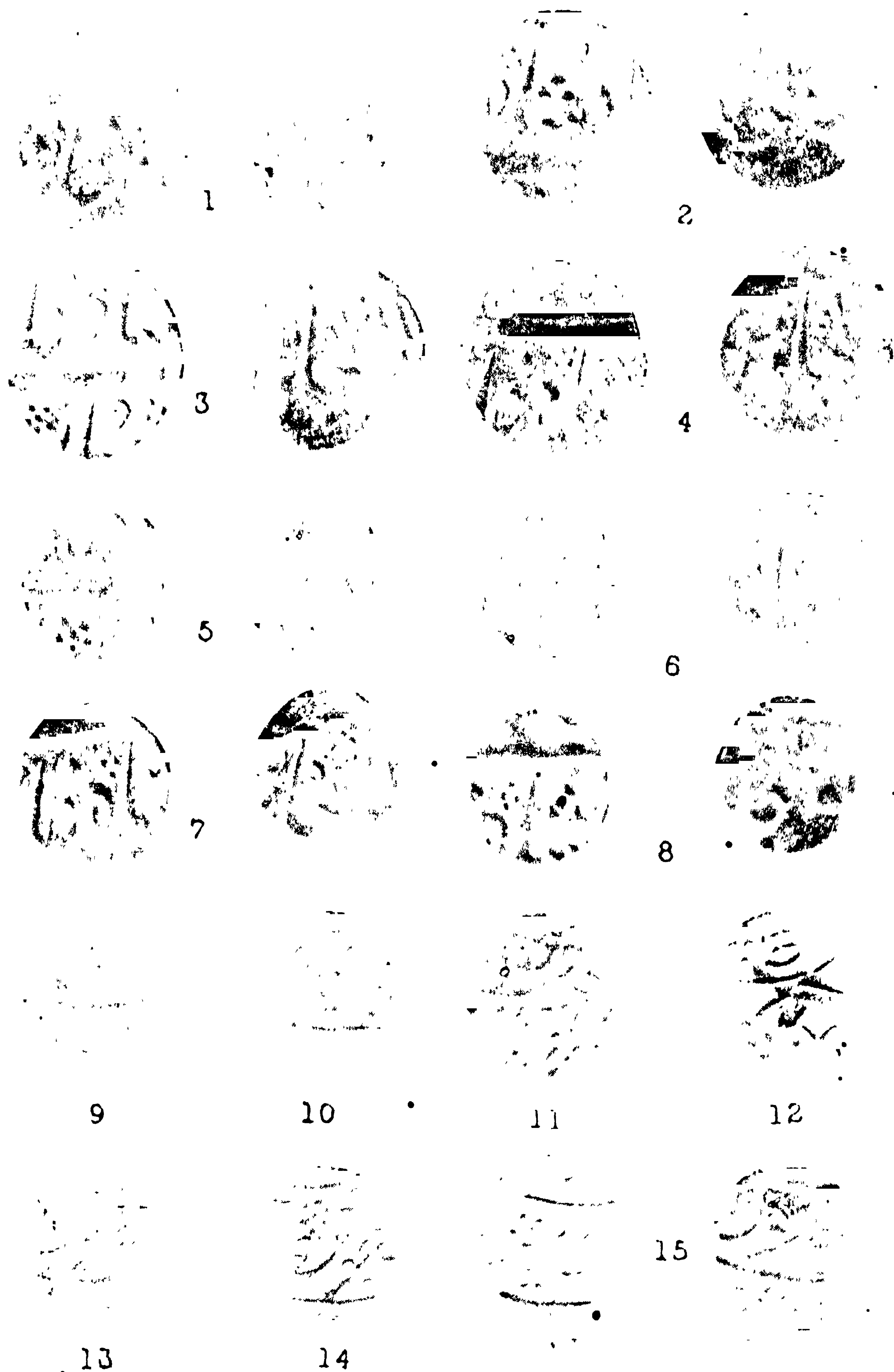
Rare Coins from the Bayana Hoard (1-5A), A Coin of Ghaṭotkacha-gupta (6), and Repousse Coins of Kramāditya (7-18)



Sub varieties of Gupta Coins (1-8), and Copper Coins from Kauśāmbī (9-14)

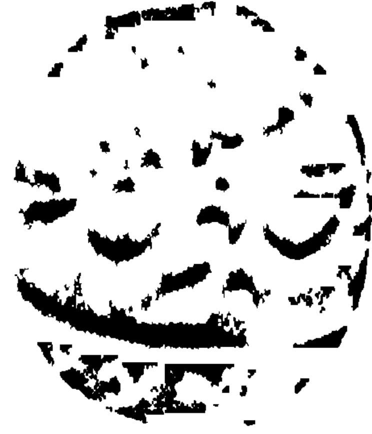


A Kalachuri Coin (1), Copper Coins of Devarāya II (2-6), A Sātavahana Coin (7), and A Chakravikrama Coin of Chandragupta II (8)

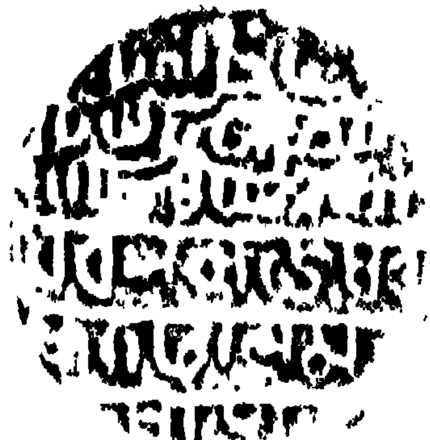


Coins of Mānājīrao Gaekwar (1-8) and Some Maratha Coins (9-15)






2 3 4



5

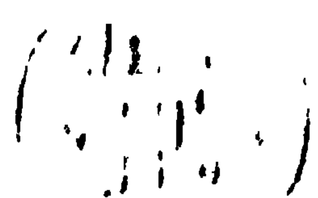
6



7


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9 10



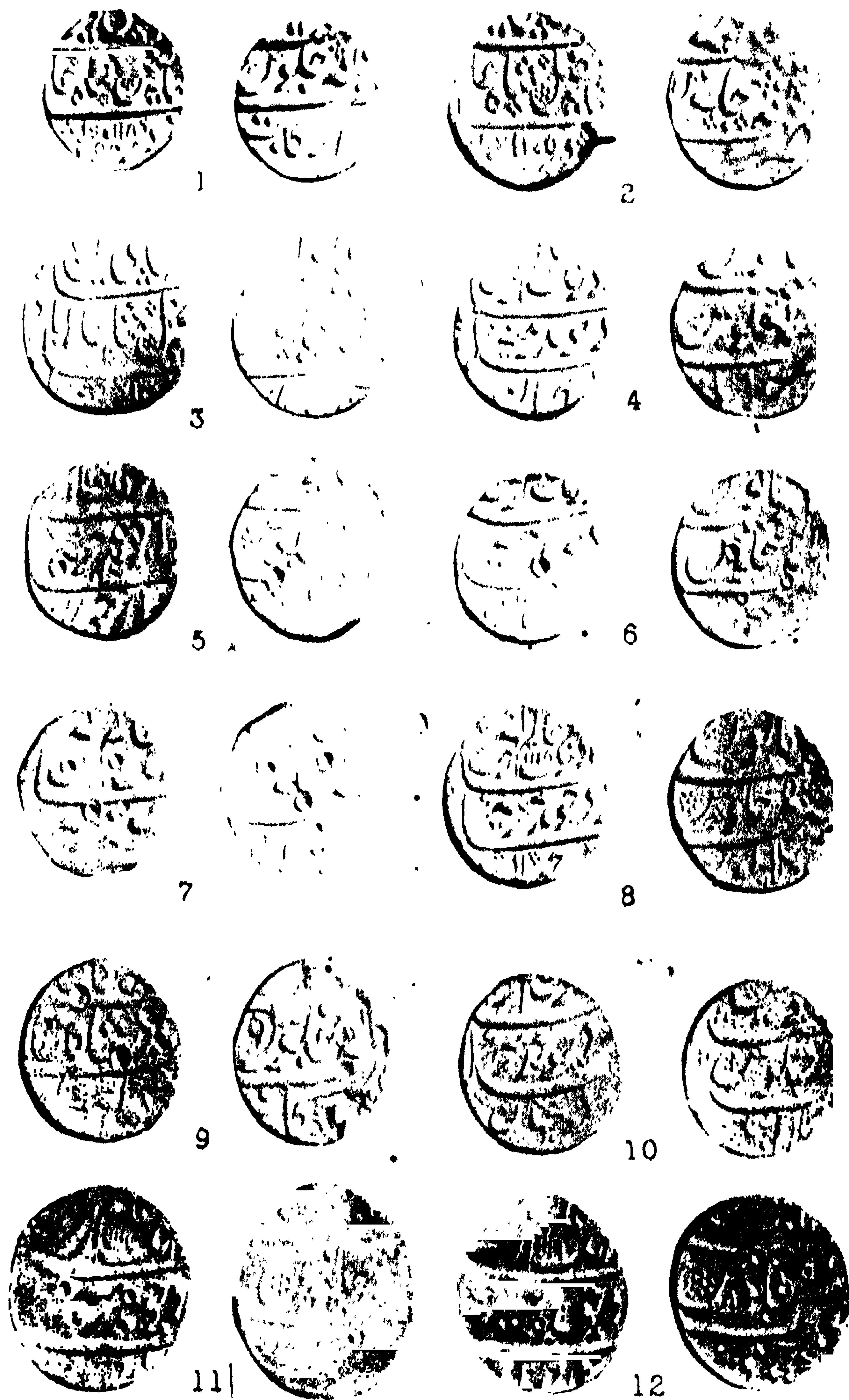

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14


Maratha Coins (1-4), A Medieval Coin of Arakan (5), Bahamani, Asaf Jahi, Qutubshahi and Baridshahi Coins (6-14)



Rupees of Shah 'Alam II of Arcot mint (1–3), and Rupees of the Nawabs of Arcot from Mints controlled by Local Governors (4–12).





1



3



4



5



6











7



8

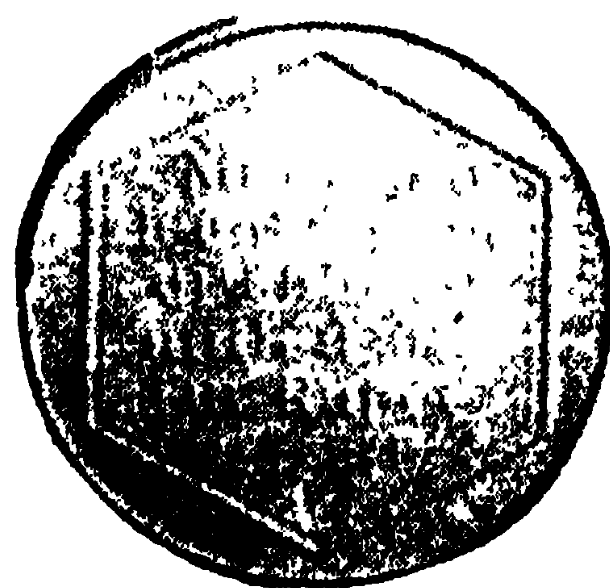


9









10



11



Coins of Restored Hindu Rajas of Mysore (1), and of Tipu Sultan (2), English occupation Coins of Kandahar (3-6), Coins of the Dutch East India Company (7, 8 & 9) and Coin-Weights of East India Company (10, 11)